


BROADBAND EXPANSION GRANT APPLICATION

For Fiscal Year 2022

<p>Primary Applicant (Name and Address):</p> <p>Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc. ("Spectrum" or "Charter") 1320 N Dr. Martin Luther King Jr. Drive Milwaukee, WI 53212 Attn: Celeste Flynn 414-277-4193 Celeste.flynn@charter.com</p>	<p>Applications MUST be UPLOADED to ERF via the Commission's website, http://psc.wi.gov/apps35/ERF_upload/content/mymenu.aspx. Refer to section 2.3 for detailed instructions.</p> <p>Applications are due and MUST be uploaded to ERF no later than: March 17, 2022 at 4:00pm (16:00) Central Time. Late applications will not be accepted.</p>
	<p>Contact for further information: PSCStatebroadbandoffice@wisconsin.gov</p>
	<p>Date: December 1, 2021</p>
<p>The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2022 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. This grant round will be funded with bond proceeds authorized by the Wisconsin Building Commission pursuant to Wis. Stat. § 13.48(30). As such, successful applicants are subject to the requirements of Wis. Stat. § 13.48(30). Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the State.</p>	
<p>Applicant Certification: In signing this application, the undersigned verifies under penalty of perjury that the Applicant and its employees and agents have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition with respect to this application; that no attempt has been made to induce any other person or firm to submit or not to submit an application; that this application has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this application has not been knowingly disclosed prior to the opening of applications to any other applicant or competitor; that all of the responses and representations of Applicant in this application are true and correct to the best of the undersigned's knowledge, information, and belief; and that Applicant agrees to, accepts, and will comply with all of the terms and conditions respecting this application and any award of a broadband expansion grant as may be established in a grant award Agreement.</p>	
<p>Name of Authorized Representative (Type or Print)</p> <p>Joseph J. Sherer II</p>	<p>Title:</p> <p>Vice President, Regional Engineering of Charter Communications, Inc., the Manager of the Applicants</p>
<p>Phone: (608) 467-9202</p>	
<p>Signature of Authorized Representative</p> 	<p>Date</p> <p>3/17/2022</p>

SUMMARY OF GRANT APPLICATION

Primary Applicant Name Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc. ("Spectrum" or "Charter")	Amount of Broadband Grant Request (round to nearest dollar) \$2,619,798
Federal Employer Identification No. Spectrum Mid-America, LLC: 43-1857213 Spectrum Mid-America WI-FY2022, LLC: 88-1251860	Amount of Matching Funds Pledged (round to nearest dollar) \$3,499,264 Charter \$483,326 (Town of Arbor Vitae-\$250,000; Town of Cloverland-\$50,000; Town of Conover-\$33,076; Town of Lincoln-\$130,000; Marshfield Clinic Health System-\$20,000; Vilas County Economic Development Corporation-\$250) Total: \$3,982,590
Contact Name and Title Celeste Flynn, Director, Govt. Affairs	Total Cost of Proposed Project (round to nearest dollar) \$6,602,388
Telephone Number (414)277-4193	Project Name BB App Spectrum, Vilas County
E-mail Address(es) celeste.flynn@charter.com	Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.) FTTP EPON
Grant Manager, if different than Primary Applicant N/A	Type of Proposed Project (Last-mile, Middle-Mile, backbone, other) Last-Mile
Grant Manager Contact Name	Grant Manager Email Address and Telephone Number
If the application proposes a public-private partnership, list the names, addresses, and FEINs of the partner companies or organizations <u>Vilas County Economic Development Corporation (VCEDC)</u> Kathy Schmitz, Executive Director PO BOX 1621, EAGLE RIVER, WI, 54521 FEIN Number: 27-0492816 <div style="display: flex; justify-content: space-between;"> <div> <u>Arbor Vitae</u> Mary Reuland, Town Clerk 10675 Big Arbor Vitae Drive Arbor Vitae, WI 54568 FEIN: 39-6005777 </div> <div> <u>Cloverland</u> Joe Spitz, Town Supervisor #4 1320 Sunset Ln. Eagle River, WI 54521 FEIN Number: 39-1472744 </div> </div>	

Conover Joe Muehlbach, Town Supervisor PO BOX 115 Conover, WI 54519 FEIN Number: 39-1089878		Lincoln Dick Stoegbauer, Town Board Chair 1205 Sundstein Road, PO Box 9 Eagle River, WI 54521-0009 FEIN Number: 39-1053163	
Brief Project Description (2 sentences) Charter requests a grant to support the construction of a new last-mile fiber-to-the-premises ("FTTP") via Ethernet passive optical network ("FTTP EPON" or "EPON") to provide high-speed broadband access to approximately 965 unserved and underserved locations in the Towns of Arbor Vitae, Cloverland, Conover, and Lincoln, Vilas County. Charter does not request any funding to support its existing network infrastructure.			
Maximum Proposed Download Transmission Speed 1000 Mbps (Scalable to higher Gig speeds in the future)		Maximum Proposed Upload Transmission Speed 500 Mbps (Scalable to 1000 Mbps / 1 Gig or higher in the future)	
Minimum Proposed Download Speed to Customer Location 200 Mbps (30 Mbps – Spectrum's low income offering)		Minimum Proposed Upload Transmission Speed to Customer Location 10 Mbps (4 Mbps – Spectrum's low income offering)	
County or Counties served by this project Vilas		Community or Communities served by this project Towns of Arbor Vitae, Cloverland, Conover, and Lincoln	
List of the broadband service providers, if any, currently serving the area the applicant proposes to serve Lumen (CenturyLink)			
Does proposed project serve an <u>unserved</u> area of the State, as defined in Section 1.4 of the application instruction? (yes/no) Yes		Is the Applicant certified as a Broadband Forward! Community or Telecommuter Forward! Community, or does the grant project propose to serve a Broadband Forward! Community or Telecommuter Forward! Community? (yes/no) Yes - Broadband Forward!	
For last mile projects or component the expected number of Business Locations that will have access to the improved broadband service (i.e., total business locations passed or with new service access). 2		For last mile projects or components the expected number of Residential Locations that will have access to the improved broadband service (i.e., total residential locations passed or with new service access). 963	
Of the improved business locations, how many locations are <i>unserved</i> ? 0		Of the improved residential locations, how many are <i>unserved</i> ? 27	
For providers that are eligible telecommunications carriers will the proposed broadband service be available to Lifeline customers? (yes/no) N/A		Are there any programs available for low-income households to access low-cost service or discounts? (yes/no) Yes	
Is the internet service provider currently participating in the Emergency Broadband Benefit Program? (yes/no) Yes and through its successor program the Affordable Connectivity Program (ACP)		Is the internet service provider currently participating in the Department of Public Instruction and CESA purchasing's Digital Learning Bridge? (yes/no) Yes	
Did the internet service provider participate in the Public Service Commission's voluntary Broadband Coverage Data Collection in 2021? (yes/no) Yes			

FY22 Broadband Expansion Grant Application

Budget & Income Summary



Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

Grant Summary

Grant Applicant:	Project:
Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc.	BB App Spectrum, Vilas County

Budget

Line:	Description / Category:	Grant Funds:	Match:	Total:
1	Contractual, Consultant Fees	\$ 1,972,899.00	\$ 2,999,181.00	\$ 4,972,080.00
2	Equipment	\$ 646,899.00	\$ 983,409.00	\$ 1,630,308.00
3	Supplies			\$ -
4	Labor (Salary, Fringe)			\$ -
5	Permitting, Licensing Fees			\$ -
6	Travel			\$ -
7	Other			\$ -
Total:		\$ 2,619,798.00	\$ 3,982,590.00	\$ 6,602,388.00
60.3% match requested				

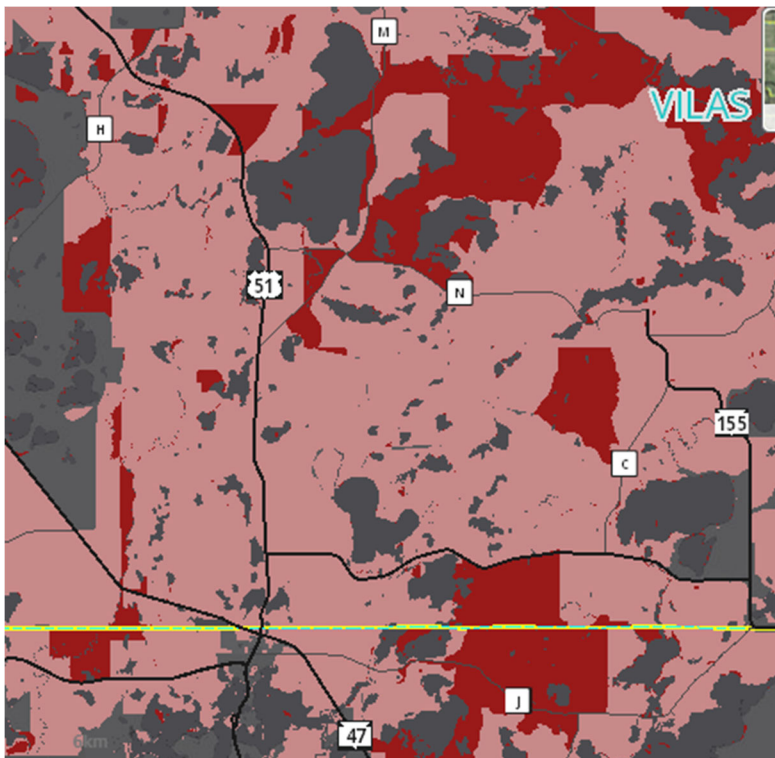
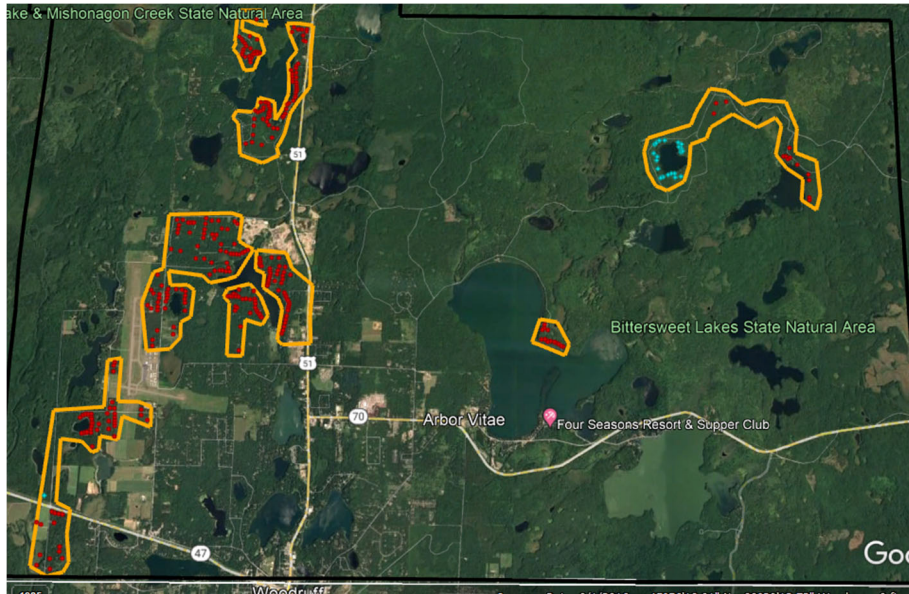
Pledged Contributions

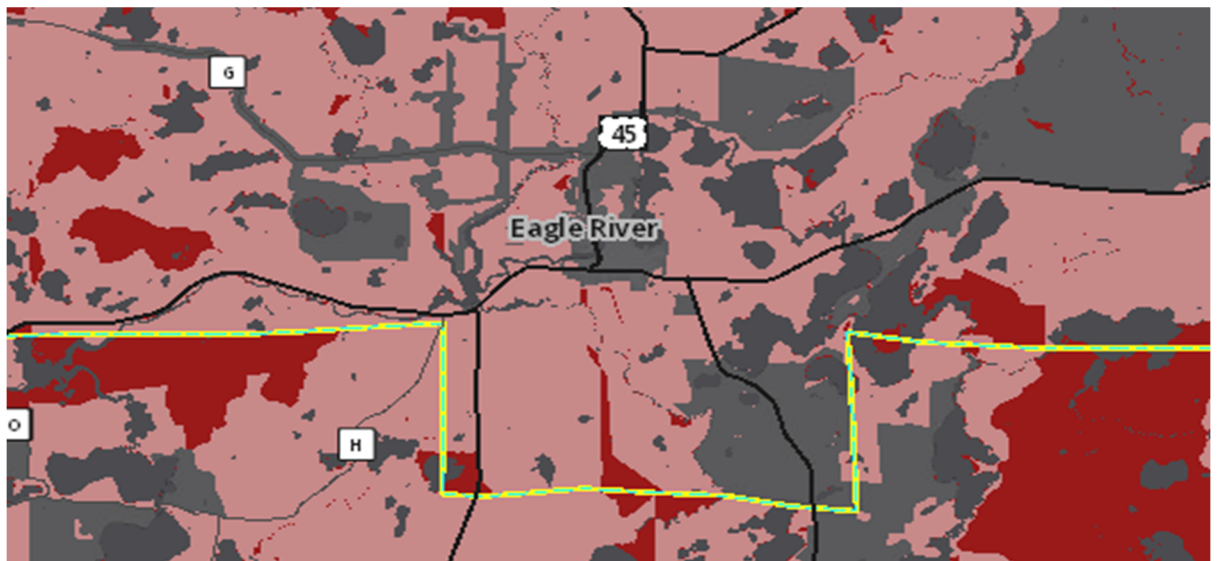
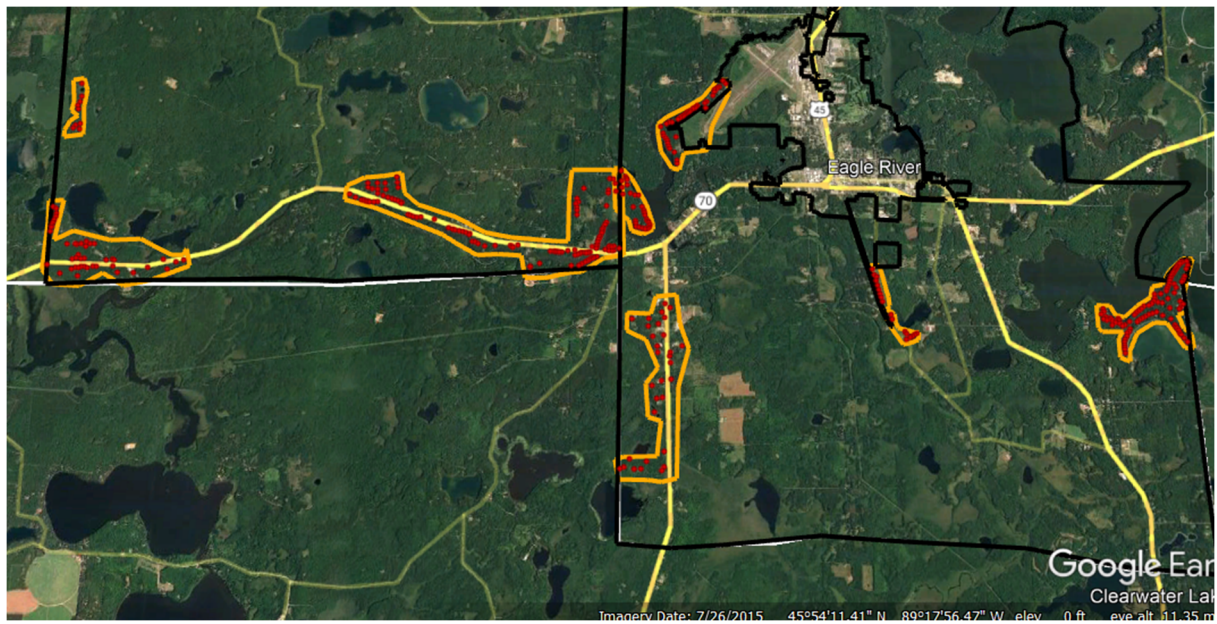
#:	Entity:	Entity Type:	Pledge Type:	Pledge:
1	Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc.	Applicant	Cash	\$ 3,499,264.00
2	Town of Arbor Vitae	Partner	Cash	\$ 250,000.00
3	Town of Cloverland	Partner	Cash	\$ 50,000.00
4	Town of Conover	Partner	Cash	\$ 33,076.00
5	Town of Lincoln	Partner	Cash	\$ 130,000.00
6	Marshfield Clinic Health System	Partner	Cash	\$ 20,000.00
7	Vilas County Economic Development Corporation	Partner	Cash	\$ 250.00
8				
9				
10				
Total:				\$ 3,982,590.00

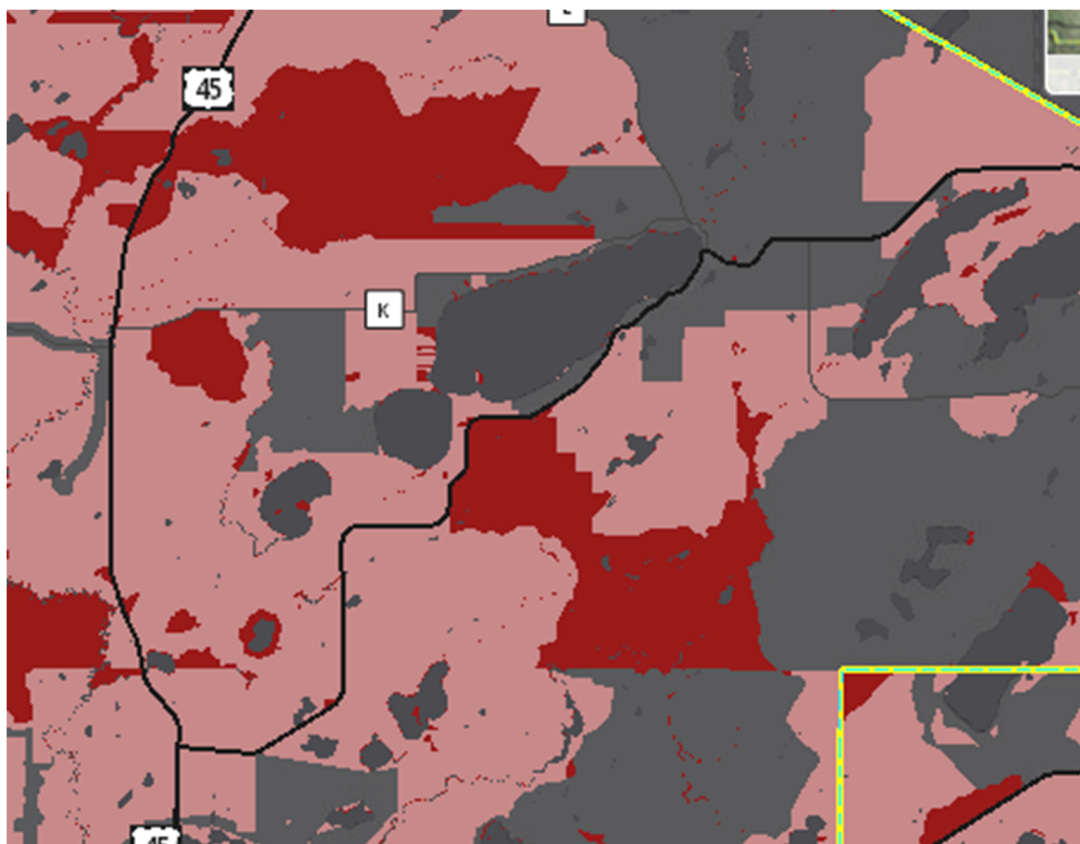
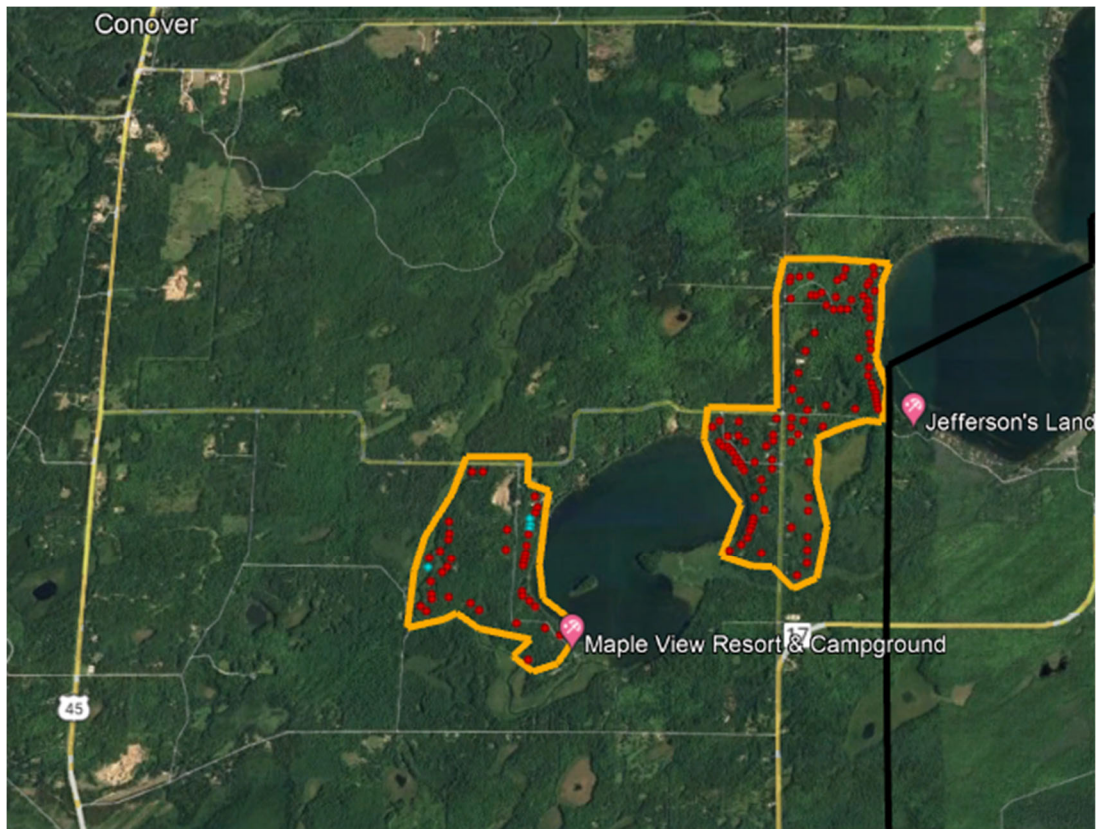
These costs do not include certain direct and indirect costs, reflecting contributions to the Project by Charter personnel that Charter is proposing to absorb itself, and for which this application does not seek grant funding. Project costs are limited to direct expenses for materials and contractor labor, only allowable expenses are included. All network builds and expansion will be fully owned by Charter. Funds requested in this Application will be used solely for the purpose of constructing and installing new broadband infrastructure throughout the designated grant area. While the Project will utilize and leverage existing facilities and assets to deliver broadband service to the Project area, Charter is not seeking funding for any portion of its existing asset base. No grant funds will be used for subsidizing operating costs.

Description of the Project Area to Be Served

The proposed Project Area is within Vilas County Towns of Arbor Vitae, Cloverland, Conover, and Lincoln. The Project includes over 100 miles of fiber optic network to connect an estimated 965 underserved homes, businesses and community anchor institutions. Maps of the proposed Project Area are shown below along with the associated state eligibility maps.







Executive Summary of the Project

Vilas County Economic Development Corporation (“VCEDC”), Vilas County Towns of Arbor Vitae, Cloverland, Conover, and Lincoln in collaboration with Charter is requesting a grant to construct a last-mile fiber-to-the-premises (“FTTP”) via Ethernet passive optical network (“FTTP EPON” or “EPON”) to provide service to unserved and underserved households in the Towns of Arbor Vitae, Cloverland, Conover, and Lincoln (the “Project”). **The Project includes building over 100 miles of fiber optic network to connect an estimated 965 underserved homes, businesses and community anchor institutions.**

The Project will use Charter’s FTTP EPON architecture, a standardized and mature model that is operated by Charter across the country, engineered and managed to meet 1 Gbps downstream speeds, 500 Mbps upstream speeds (and engineered to be scalable to higher speeds in the future), and latency of well below 100 milliseconds. Charter’s FTTP EPON deployment is relevant and suitable for remote learning and remote working, offering very high bandwidth and low latency service attributes that accommodate numerous members of a household or small business simultaneously using bandwidth-intensive applications, such as video conferencing, telemedicine, video streaming, gaming, virtual or augmented reality sessions, and numerous other applications. New customers in the Project Area will have access to several Internet speed options, including Charter’s “Spectrum Internet” with a standard starting speed of up to 200/10 Mbps and Charter’s “Internet Gig” service at up to 1000/500 Mbps. Additional services that will be available to Charter Internet customers include, but are not limited to, anti-virus security protection and in-home WiFi. As an added benefit of its FTTP network, Charter will also be in a position to offer competitive video, mobile and voice services in the grant area.

Because Charter has a well-established process for initiating and overseeing new construction projects, existing relationships with contractors to perform design, make-ready and construction work, and holds numerous regulatory authorizations and pole attachment agreements that can facilitate prompt access to rights-of-way and utility poles, it anticipates that it would be able to start work on the Project promptly upon approval. If awarded grant funds, Charter anticipates beginning the project promptly with completion within the project period of up to 24 months, subject to timing of grant awards. Any delay in meeting that time frame related to pole attachment make-ready work required to install facilities, permitting, ability to access relevant locations, or other issues outside Spectrum’s reasonable control, including pandemic-related or raw materials shortages, would promptly be brought to the attention of the PSC in order to secure additional time to complete the Project.

I. Priority Factors

a. Matching Funds

Charter estimates the direct cost of this network construction at \$6,602,388, and requests a \$2,619,798 (40%) grant to complete the Project. Charter and our public partners would contribute the remaining cost to complete the Project—a contribution of \$3,499,264 from Charter; and \$483,326 from the Towns of Arbor Vitae, Cloverland, Conover, Lincoln, Marshfield Clinic and the VCEDC; a combined \$3,982,590, or 60% of the Project’s up-front, direct construction costs. In addition, Charter will absorb all indirect costs and all operational costs of the Project going forward.

Charter's commitment to contribute or absorb substantial costs associated with the Project, and seek grant funding for only a portion of the direct construction costs for the new network facilities, results in a budget that will leverage Charter's existing resources, maximize the impact of grant funds, and streamline grant administration due to the limited nature of the expenditures for which Charter is seeking reimbursement.

Charter will be able to leverage its substantial existing internal resources and expertise to provide its management and supervision of the Project, and is not seeking reimbursement of its costs associated with project administration or any design, coordination, and other tasks that will be carried out by Charter internal employees within its construction, engineering, and field operations organizations. In addition to increasing the cost-effectiveness of state funds, Charter's commitment to limit the expenses included in the budget will simplify administration of the grant and verification that grant funds are expended only for allowable costs.

As set forth in the accompanying budget spreadsheet and justification, the Project includes within its proposed budget only a limited set of Charter's estimated direct, verifiable costs of construction. These consist of estimated material costs; direct contractor labor to carry out design, make-ready, and construction work; and licensing/permitting expenses. As previously stated, indirect costs and certain other direct costs associated with the effort—such as the contributions by Charter's internal employees on project design, supervision, and management—will be absorbed by Charter as part of its regular operations.

The network will also be backed and operated by Charter, the nation's second-largest broadband provider with extensive experience owning, operating, maintaining, and upgrading broadband networks, as well as well-recognized financial stability. Charter's financial resources and recognized, investment-backed commitment to rural America provide reassurance that Charter will be able to carry out the terms of the grant and continue to operate the system going forward. While these resources and assets are essential for the Project's success, Charter is not requesting any grant funding or support for its existing assets or facilities.

b. Public-private partnership

Here are the actions the VCEDC has taken with its many partners over the past two years to enhance Broadband in Vilas County.

-
- Researched, documented, and mapped the availability of Broadband including speeds and ISPs.
 - Created a Broadband Workgroup dedicated to enhancing Broadband.
 - Developed a program called *Broadband Buddies* with representatives from each Vilas County town and the Lac du Flambeau Tribe where information is shared, and strategy developed.
 - Supported all Broadband projects, including those funded through WI PSC grants.
 - Leveraged media contacts to share the Vilas County Broadband story.
 - Published a tremendous Broadband page on the VCEDC website (see below).
 - Developed and submitted a 2021 Broadband survey to Vilas County stakeholders with nearly 1500 individual responses.
 - Partnered with Vilas County Mapping Department to create v2.0 of Vilas County's Broadband coverage map.

https://experience.arcgis.com/experience/6eb777063b464ee6b5405dbc6d1ee15c/?data_id=da taSource_add_from_url_entry-17d9b9fcfa0-layer-6%3A217

- Partnered with Charter Communications to develop this project area and engaged the benefitting Towns to get financial and stakeholder support.
 - Supported and contributed to the writing of the grant application.
-



[VCEDC Broadband Webpage](#)

Through VCEDC's development of its Broadband strategy it is uniquely positioned to partner with Charter Communications on a successful project. Since 2020, the VCEDC Broadband Workgroup has invested nearly 2,000 hours of volunteer and Executive Director time into enhancing Broadband in Vilas County.

The Towns of Arbor Vitae, Cloverland, Conover, and Lincoln have either Broadband Workgroups or Town Board approved Broadband Committees made up of volunteers who are committed to enhancing Broadband. They are all partners in this project and these communities have ALL committed funds to make the project successful.

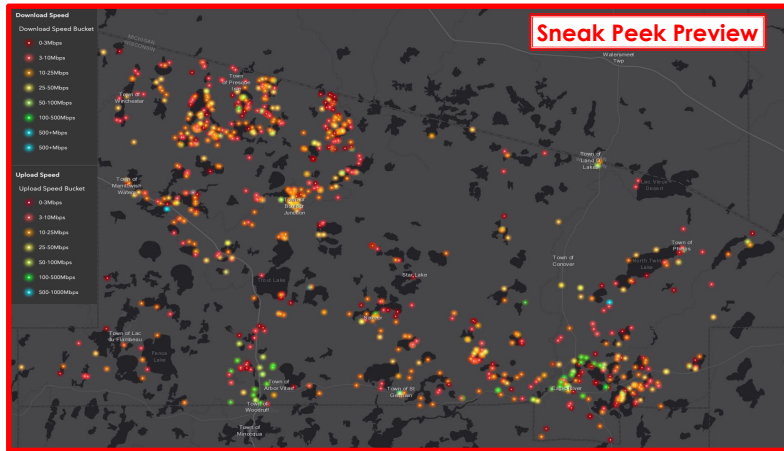
VCEDC and Town *Broadband Buddies* are well positioned to work with Charter Communications to complete this project quickly and efficiently. A member of the VCEDC Broadband Workgroup is Vilas County's IT Director and provides the crucial point of contact working with Vilas County government to help with permitting and construction assistance to Charter. Towns are already actively working with Charter Communication and other ISPs to expedite permits.

For example, the Town of Cloverland has expedited the approval of four broadband easements for Charter Communications. Town of Arbor Vitae Chairman Frank Bauer, along with the other Town Board members, has committed to facilitating and expediting any broadband related permit application requiring town input or approval. The Town of Lincoln has appointed an experienced public sector volunteer to oversee the grant application process and the project. With eight years of experience in rights-of-way, easements, and construction project, his talent will be a great asset.

ISPs struggle to market their service. VCEDC, through its economic and media relations focal points and each town with its local communications network, will help market Charter Communication's service to ensure the project is successful and reaches as many stakeholders as possible with high-speed fiber broadband.

It does not stop there or with this project, however. It is only the beginning. The VCEDC will continue to work with Charter and other ISPs to deliver high-speed broadband to all Vilas County stakeholders. In addition to its *Broadband Buddy* program, the VCEDC is preparing to release its second or Gen2 Broadband survey in 2Q 2022. This survey will target all Vilas County stakeholders with a goal of

collecting 5,000 responses. These responses will be used to create its Gen3 Broadband coverage map. Here is the [Gen2 map](#).



The current map is interactive, so each click of a dot reveals detailed information from that address. VCEDC's goal is to create a *Blue Wave of Broadband* in Vilas County (blue dots means broadband speeds of 500Mbps and higher). Each town included in this project was provided its own data and is using it in a variety of ways. These towns are also developing their own data. Local data is highly accurate because it comes directly from the broadband consumer. Here is an excerpt of one example from Cloverland.

Street Address	Zip Code	Is high speed internet currently available at this address?	Download Speed	Upload Speed	Are you having / did you have a problem signing up or having internet service installed?
2200 Babson Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	45.32	1.67	Yes
2203 Babson Lane	54821	Yes, it's available and installed	2.3	6	Yes
2211 Babson Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	15	10	No
2223 Babson Lane	54821	No, internet service is NOT available			Yes
2351 Babson Ln.	54821	Yes, it's available and installed			No
2316 Babson Ln.	54821	Yes, it's available and installed			Yes
5599 Bayview Tr	54821	No, but I do have slower than 25Mbps/3Mbps internet installed			No
5599 Bayview Tr	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	14.53 Mbps	0.00 Mbps	No
5599 Bayview Tr	54821	Yes, it's available and installed	5.59	0.63	No
1290 St. Jean Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	15	2	No
1381 St. Jean Ln	54821	Yes, it's available and installed	4.29	0.39	No
8724 St. Jean Ln	54821	Yes, it's available and installed	25.66	1.06	No
1257 Crow Lane	54821	Yes, it's available and installed	150mbps	50mbps	No
1948 Crow Tr.	54821	Yes, it's available and installed	21.79	1.43	No
1958 Crow Tr	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	8.4	0.6	Yes
2016 E Hunter Ln Rd	54821	No, internet service is NOT available			Yes
8450 E Hunter Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed		2mbps	No
8396 E Hunter Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed			No
1182 Franny	54821	No, internet service is NOT available			evidence now, so none, so not sure <1
5660 Hay Tow	54821				No
1159 Joyal Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	21	Na	Yes
8222 Kouth Lane, Eagle River, WI 54821	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	11.31	.36	No
2133 Lake Pointe Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	15	1	Yes
2163 Lake Pointe Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	5.81 mbps	21 mbps	No
1147 Lake Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	150 Mbps	15 Mbps	No
1168 Lake Lane	54821	Yes, it's available and installed	8.94	1.4	No
2104 Lake Lane	54821	No, internet service is NOT available			Yes
2113 Lake Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed			No
2123 Lake Lane, Eagle River, WI 54821	54821	No, but I do have slower than 25Mbps/3Mbps internet installed			No
2029 Lake Lane, Eagle River, WI 54821	54821	Yes, it's available and installed	5.31	0.67	No
2031 Lake Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	2.45	0.62	No
2031 Lake Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	2.45	0.62	No
2039 Lake Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed			Yes
2145 Lake Lane, Eagle River	54821	No, internet service is NOT available			No
3886 nature view	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	16 mbps	1	No
5969 Nature View Ln	54821	Yes, it's available and installed	4 mbps	0.2 mbps	Yes
6316 Nature View Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	7.87	0.8	Yes
1413 Nature View Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	7.46	0.8 mbps	Yes
1430 Nature View Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	21.58 mbps	1.68 mbps	Yes
5748 Nature View Ln	54821	No, internet service is NOT available			Yes
2058 Nature View Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	8.89	did not provide in	Yes
1264 Nature View Ln	54821	No, internet service is NOT available			Yes
2052 Nature View Ln	54821	No, internet service is NOT available			Yes
2035 Nature View Ln	54821	Yes, it's available and installed	20mb	10mb	Yes
2076 Nature View Ln	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	20mb	2	Yes
1320 Sunset Lane	54821	No, but I do have slower than 25Mbps/3Mbps internet installed	21	1	No
2728 Sunset Lane	54821				1
6387 Sunset Lane Dr	54821		31.48	28	Yes

These are examples of the kind of structure and process behind Vilas County's broadband expansion strategy. VCEDC, the four towns, and Charter Communications create a model for public/private partnerships. The bottom line is developing this application has taken tremendous teamwork by Charter Communications, each town representative, and the VCEDC. This same teamwork will make this project a success.

Charter, described in more detail below, is an experienced service provider and a leading broadband company, and is well-versed and experienced in abiding by all necessary federal, state, and local requirements that are impacted during the build out and expansion of its network. Charter's role in the Covered Partnership will consist of:

- **Construction Management:** If the Project is selected for a grant, Charter will work with the VCEDC and the Towns to verify Project data regarding unserved and underserved households and businesses, secure the necessary permits, pole attachments, and other authority as necessary to support the Projects. In addition, Charter will complete the construction plan (including timeframes and costs) and manage all other aspects of the construction effort, maintenance of the system, and customer intake and service delivery. All networks builds and expansion will be fully owned by Charter or a Charter affiliate.
- **Commitment of Funds and Personnel:** If the Project is selected for a grant, Charter will contribute substantial private financial and operational resources to ensure the success of the Project, consisting of:
 1. A direct cash contribution to the direct design, construction, and licensing and permitting costs for the Project (a commitment estimated at \$3,499,264, or 53% of the estimated direct construction costs of the Project);
 2. A contribution of all indirect costs of the Project, which Charter will absorb itself; and
 3. By absorbing all other direct costs of the Project not captured in the direct design, construction, and licensing/permitting costs, including supervision and management of the effort by Charter personnel.
- **Collaborating on Community Engagement:** Work with VCEDC and the Towns to assist with digital literacy and broadband adoption strategies.

Letters of Commitment for each member of the partnership, setting forth their respective roles, are attached to this application as **Exhibit A**.

c. Existing broadband service

The project areas are either unserved or underserved according to the PSC map except for a small area to the west of South Twin Lake in the Town of Conover. This area appears as served by color coding on the map; however, the map is not accurate as a click to obtain the information on the VCEDC Broadband Coverage map shows 6Mbps download and 1Mbps upload in this area. VCEDC's 2021 Broadband survey of this area confirms it is underserved.

Reference Vilas County Broadband Coverage Map:

https://experience.arcgis.com/experience/6eb777063b464ee6b5405dbc6d1ee15c/?data_id=dataSource_add_from_url_entry-17d9b9fcfa0-layer-6%3A217

Current Competitor Speeds in Project Area

Wireline Carrier*	FCC Tier	Tech Type	Max Down Speed	Max Up Speed	Census Block Count	% of Project Census Blocks**
CenturyLink, Inc.	<= 25 Mbps	DSL	25	2	9	14.3%
CenturyLink, Inc.	> 25 and <= 100 Mbps	DSL	100	10	48	76.2%
CenturyLink, Inc.	> 25 and <= 100 Mbps	FTTH	100	10	1	1.6%
CenturyLink, Inc.	> 500 and <= 1,000 Mbps	FTTH	940	940	3	4.8%

*Competitors who do not specify speeds are not included in list.

**Does not total 100% as multiple competitors can overlap and some census blocks may be unserved

d. Project impact

Service Offerings and Price

Upon completion, residents in the proposed Project Area will have access to Charter's Spectrum Internet Gig service (up to 1000/500 Mbps). With Spectrum Internet, customers can simultaneously stream videos, download music and more without sacrificing performance. Spectrum provides free modems and the fastest, most powerful in-home WiFi to do more on more devices.

Charter employs a nationwide pricing structure (called Spectrum Pricing & Packaging), which offers standardized pricing for each tier of broadband internet service Charter offers new customers across its service territory. Charter's pricing strategy ensures that rural customers receive the same pricing as other highly competitive areas in the state. Charter's wireline broadband offerings currently include no data caps, usage-based pricing, early termination or modem fees.

Current prices for Charter's Spectrum Internet Assist, Spectrum Internet, and Spectrum Internet Ultra service tiers, and its planned pricing for the Spectrum Internet Gig service tier, are as follows:¹

Table 1: Standard Charter Wireline Residential Broadband Service Offerings and Prices

Speed Tier ²	Downstream Mbps	Upstream Mbps	Standard Monthly Rate – without Promotional Pricing ³	Installation Fee
Spectrum Internet Assist ⁴	30	4	\$17.99	\$0.00 ⁵
Spectrum Internet	200	10	\$74.99	\$49.99
Spectrum Internet Ultra	400	20	\$94.99	\$49.99
Spectrum Internet Gig	1000	500	\$114.99	\$49.99

In addition to the standard, non-promotional rates itemized above, Charter may also offer promotional pricing, including bundled discounts. Charter's current promotional offerings can be found at <https://www.spectrum.com/internet>.⁶ Spectrum's terms of service will apply to all tiers of service. In addition to wireline broadband services, Charter will also offer video, voice, and mobile services in the grant area.

Low Income Programs

Spectrum has engaged in several initiatives and established numerous business practices that benefit consumers in need and demonstrate our commitment to the community. As described below, Spectrum has established several programs to provide low-cost internet service particularly for students and remote learning, has assisted customers struggling to pay their bills for service, and supported communities by providing good paying jobs and long-term careers, and strengthening

¹ All rates, speeds and terms of service stated herein are subject to change.

² Represented pricing is for wireline residential broadband service only. In addition to wireline broadband services, Charter will also offer video, voice, and mobile services in the grant area.

³ Customers can add WiFi for \$5.00 per month (Spectrum Internet Assist, Spectrum Internet & Spectrum Internet Ultra).

⁴ Spectrum's Internet Assist program provides 30 Mbps broadband to qualified families with children on the National School Lunch Program or seniors receiving supplemental income.

⁵ For self-installation only. Additional fees may apply for professional installation.

⁶ All promotional offers are subject to change and may not be available in all areas or to all customers.

local organizations. Charter's current programs are described below. Just recently Charter announced an enhanced affordability solution called "Internet 100" for \$29.99, which is tied to the federal government's new Affordable Connectivity Program (ACP). Customers qualifying for ACP in Wisconsin will be eligible to receive a new low-cost, low-income product offering of up to 100Mbps download and 10Mbps upload for less than the monthly \$30 ACP subsidy. This service will remain available for the duration of the ACP.⁷ For the duration of the ACP, Charter also currently plans to continue offering Spectrum Internet Assist to customers who meet the eligibility and prefer to purchase that service.

- **Stay Connected K-12 Program:** To help address the lack of Internet connectivity faced by some student households, through the Stay Connected K-12 program, Spectrum is working directly with schools and school districts across its footprint to assist them in offering high-speed, cable broadband Internet access to students, educators, and staff in their homes. Spectrum is currently connecting thousands of students and educators through this program across the Country. This product offering helps to ensure that learning, teaching, and working are uninterrupted by giving schools and school districts the flexibility to add students to the program when needed, and provide much-needed in-home connectivity at speeds up to 50 Mbps/5 Mbps. To date, Spectrum has established such relationships with school districts in Wisconsin and 18 other states, including Alabama, California, Colorado, Connecticut, Florida, Georgia, Idaho, Indiana, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New York, Ohio, Oregon, Texas, and Washington.
- **Bulk Rate Solution to Bridge Digital Divide:** Charter now also offers a bulk rate partnership opportunity for counties, municipalities, housing authorities, or other local entities to identify homes in underserved areas and provide them with a heavily discounted bulk rate for Spectrum's Internet service offering. If the County is interested in exploring a bulk rate discount program, Spectrum is happy to further discuss this at the appropriate time.

e. Scalability

Charter's participation in the Federal Communications Commission's Rural Digital Opportunity Fund (RDOF) rural broadband expansion program will allow significant synergies with Charter's existing infrastructure and scalability in connection with this Project. Charter's RDOF will add 7,449⁸ additional locations in Vilas County beyond what the proposed Project would provide.

Charter's network design offers scalability that non-wireline offerings cannot match. The FTTP EPON architecture proposed for the Project will scale to support customer growth and data usage growth for (a) ever increasing application requirements; (b) increasing quality demand; and (c) lower response/latency demands for ever increasing usage of highly interactive applications.

FTTP EPON technologies leverage fiber optic cables that provide vast amounts of bandwidth over a very low loss transmission medium. Fiber backbones operated by the largest communications companies in

⁷ The discount is up to \$75 per month in Tribal Lands. The ACP is limited to one monthly service credit per household. Other program qualifications and restrictions may be found at www.spectrum.net/support/internet/affordable-connectivity-program. Terms and conditions of product service and offering may be subject to change.

⁸ Estimated number of locations provided by the FCC at the time of award. Actual number of locations subject to future walkout, design, engineering and other verification.

the world, such as Charter, rely on fiber optic cables to carry Terabits per second of traffic in a single fiber strand. This same technology concept is applied in the last mile FTTP architecture, providing growth support for decades to come. Scalable elements also include routers and switches that support higher speeds and services.

As Charter adds customers over time and as customers consume more bandwidth, Charter's scalable model and proven capacity management processes will accommodate this growth. While Charter will be building a new last mile FTTP EPON network in the Project Area, this last mile network will be connected to Charter's existing robust and scalable network tiers, which are already in place and ready for growth. Charter augments its capacity through normal operating procedures, and these procedures will extend to the proposed Project Area seamlessly.

In addition, recognizing the importance of fast, reliable service for community institutions, **Charter also offers up to 100 Gbps symmetrical speeds to large businesses, schools, libraries, hospitals, and other important community institutions through customized dedicated builds by its Spectrum Enterprise business organization.** The present application and proposed budget do not include the costs of such customized builds; however, Charter's network presence in the project area would better position the company to make such offers available.

f. Economic development

Our partners offer the following input:

Today, access to high-speed broadband is **everything**. No matter the interests or job of the stakeholder, high-speed broadband is essential. A waitress at the Honey Bear Inn in the Town of Cloverland summed up the basic economic problem of unreliable and slow broadband perfectly saying, ***"It is a real problem when our internet goes down and we can't process a charge card."***

The VCEDC is committed to making Vilas County home to remote workers, entrepreneurs, and new and expanding businesses. Existing businesses need high-speed broadband just as much.

Here are three examples of those who will benefit in the individual towns.

Pukall Lumber Company

Pukall is an **Arbor Vitae**-based company established in 1937 during the Great Depression. This family-owned business epitomizes the entrepreneur spirit of Vilas County. Through the leadership of its present co-owner, Susan Pukall, and its previous generations of owners, Pukall's success continues to grow.

Having expanded to four locations in Vilas, and surrounding Oneida County, it continues to be an innovative organization, which tremendously benefits the community not only through their employment of 110 people, but through their community support and involvement. Getting more "Pukall-type businesses" to open in Vilas County is VCEDC's goal and Charter Communication's four-town project will help this effort. Ms. Pukall says it best in her support letter below.



10984 Hwy 70E • Arbor Vitae, WI 54568 • Phone 715-356-3252 • Fax 715-356-5222

March 8, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support for Charter Communications Vilas County Broadband Expansion Grant Proposal

Dear Ms. Nieto,

I am writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Vilas County project. The area covered in this project is very underserved by broadband.

As a business owner and resident of this area, I know firsthand that lack of consistently reliable and speedy internet creates many problems for our business operations, our employees and our customers. Pukall Lumber operates lumberyards and building supply stores in 4 locations in Vilas and Oneida counties and has 110 employees. Our entire operating system and credit card processing are cloud based, so without reliable internet we have a hard time conducting business. We also rely on the internet for our outlying stores to link into the phone service at our headquarters. Some of our sales staff want to work from home part time, but don't have access to reliable internet service.

The Northwoods is the premier tourist destination in northern Wisconsin and there has been a large influx of new residents during Covid who want to work and study online. Without access to the same fast, reliable internet services available in urban parts of our state, Wisconsin's rural businesses, schools and communities will continue to lag in economic opportunities. Please give Charter Communications the opportunity to provide excellent internet connectivity to our county.

Sincerely,

A handwritten signature in cursive script that reads "Susan Pukall".

Susan Pukall

Lakeland Noble F. Lee Memorial Airport

The Lakeland Airport was established right after World War II ended in 1945. Since then, this **Arbor Vitae**-based airport has grown to two asphalt runways and handles an average of 74 aircraft per day from single engine transient aircraft to multi-engine taxi and general aviation.

Airports are essential to economic diversity, development, and growth. Business movers and shakers use aircraft as fast, safe, and efficient transportation. Having the Lakeland Airport in **Arbor Vitae**, Vilas County creates vitality and economic strength.

As Airport Administrator Jon Schmitz puts it, "This project will provide another important enhancement to ensure the quality of life continues to keep pace with the ever-increasing communications related needs of the area's ever-changing economy." Jon should know, he sees many of the entrepreneurs who come to Vilas County. Here is more from Jon.

LAKELAND

NOBLE F. LEE
MEMORIAL AIRPORT
1545 N. FARMING ROAD
ARBOR VITAE, WI 54568
715 356-4340 Telephone
715 356-5340 Fax
lakelandairport@frontier.com

March 3, 2022

Ms. Kathy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

RE: Letter of support for Charter Communications – Vilas County Broadband
Expansion Grant Program

Dear Ms. Nieto,

Lakeland Airport Commissions, representing the four (4) municipalities who jointly own, manage and operate Lakeland Noble F. Lee Memorial Field (Lakeland Airport), who I serve as Administrator; **the purpose of this letter is to express the Airport Commission's strong support for the application being submitted by Charter Communications for a Year 2022 Broadband Expansion Program - Grant Application.**

Implementation of Broadband services for the area will provide another important enhancement to ensure the quality of life continues to keep pace with the ever increasing communication related needs of the area's ever changing economy.

The area covered by this project currently has a significant concentration of living units which are (extremely) underserved by Broadband Services.

We hope you will provide your positive consideration to this important, much needed, action.

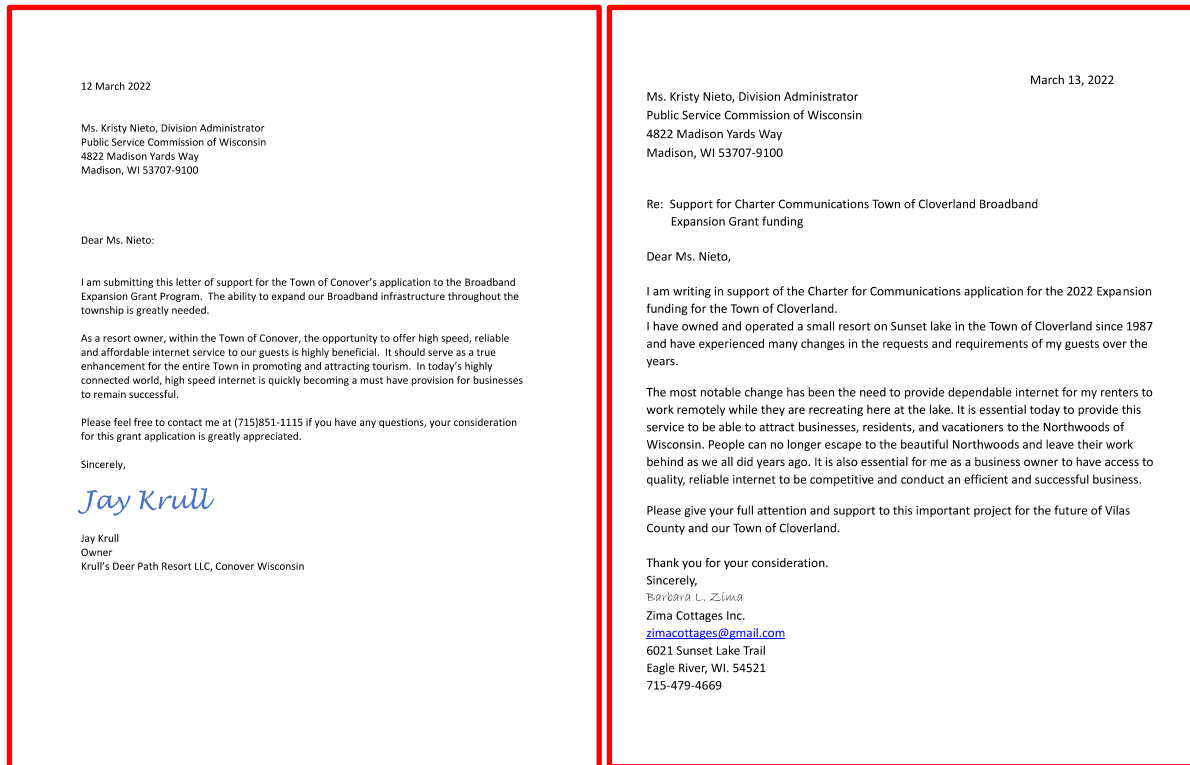
Jon Schmitz, Administrator
Lakeland Airport Commission

Krull's Deer Path Resort, LLC and Zima Cottages, Inc.

Since the logging days in Vilas County, resorts have been a key attraction of visitors to the area. The industry has changed and evolved over the past 100+ years but is still a primary driver of Vilas County's economy. One of the biggest recent changes for the resort industry has been the demand for these small businesses to provide broadband for their guests.

While the VCEDC is working hard to diversity and grow the economy, strengthening the existing tourist-based economy is a priority. There are many examples of Vilas County resort owners who are asked by potential guests if they have high-speed broadband at their properties, and unfortunately, many need to say no. Hearing first-hand from these resort owners is important to understanding the need for broadband and getting funding for this project.

Jay Krull, Owner of Krull's Deer Path Resort, and Barbara Zima of Zima Cottages summarize this challenge perfectly.



Please note, neither Jay nor Barbara say broadband is a nice-to-have; it is a necessity.

Krull's Deerpath and Zima Cottages are not the only resorts who support this project. Other resorts including the Chanticleer Inn and The Conger Collection also provided support letters to this project. In total there are 23 letters supporting these projects, plus 30 stakeholder signatures from Town of Lincoln.

One final point revolves around seasonal employees. These employees tend to be young and are highly connected to their e-devices and social media. They need to have access to broadband to want to come to the area. Without these seasonal employees the tourist economy suffers. Giving them access to high-speed broadband through this project will help the economy in many, many ways.

Please provide statements to each of the following if they apply to the project area:

- Economic impact the project could have for an individual business located in the project area.

Barbara Zima of Zima Cottages on Sunset Lake in the Town of Cloverland sums up the economic impact of this project perfectly (see letter above). She says, "It is essential today to provide this service to be able to attract businesses, residents, and vacationers to the Northwoods of Wisconsin. People can no longer escape to the beautiful Northwoods and leave their work behind as we all did years ago. It is also essential for me as a business owner to have access to quality, reliable internet to be competitive and conduct an efficient and successful business." There is no greater economic impact than staying in a successful business!

- How an improved download and upload transmission speed could better support a specific business in the project area.

Susan Pukall, co-owner of Pukall Lumber, summed up the improved download and upload speeds perfectly. “As a business owner and resident of this area, I know firsthand that lack of consistently reliable and speedy internet creates many problems for our business operations, our employees, and our customers.” Pukall goes on to say, “Our entire operating system and credit card processing are cloud-based, so without reliable internet we have a hard time conducting business. We also rely on the internet for our outlying stores to link into the phone service at our headquarters. Some of our sales staff want to work from home parttime, but don’t have access to reliable internet service.”

The bottom line is with improved high-speed broadband through Charter’s proposed project, Pukall Lumber could grow and be more efficient in its business operations.

-
- How improved broadband service could impact residential property values, supported by local sales data if available.

Studies demonstrate the availability of high-speed broadband increases property values from 5 to 11%. Those figures have been confirmed by local realtors who say the first question prospective buyers ask is about Highspeed Broadband. **If it is unavailable or poor, buyers are not interested in the property.**

This fact is further stressed by Brian Nerdahl, Town of Arbor Vitae Supervisor and leader of its Broadband Workgroup who says, *“As a result of these factors, properties with high-speed broadband access typically receive bids that are up to 10% higher than comparable properties without this capability.”*

- How improved broadband service to a residential portion of the project could benefit a telecommuting population.

If COVID-19 spurred the Great Resignation, it also spawned the Great Migration, at least to Vilas County. Vilas County has welcomed many, many second homeowners as permanent residents. Work-from-home created opportunities for those individuals to leave their city-homes and come to Vilas County to work and enjoy the Northwoods and lakes right out their back doors. Their challenge is adequate broadband.

A great example from the Town of Lincoln includes *“A professional woman who moved here in 2020 and works remotely in IT for a large Houston based Children’s Hospital.”* In addition, they have a web designer who chose to move to Lincoln and will continue to grow their business with expanded broadband.

Other examples from the Town of Cloverland are a *“CAD Designer, Pharmacy Technician, Software Developer, and a probable equine developer. These couples had ties to the area from younger years, and are returning to raise their families and live, in Northern Rural Cloverland.”*

These work-at-home, tele-commuting, or remote workers are in higher paying jobs. When they move to Vilas County, they bring their large salaries with them meaning more spending in Arbor Vitae, Cloverland, Conover, and Lincoln, which benefits the overall economy of not only those towns, but Vilas County and the entire region.

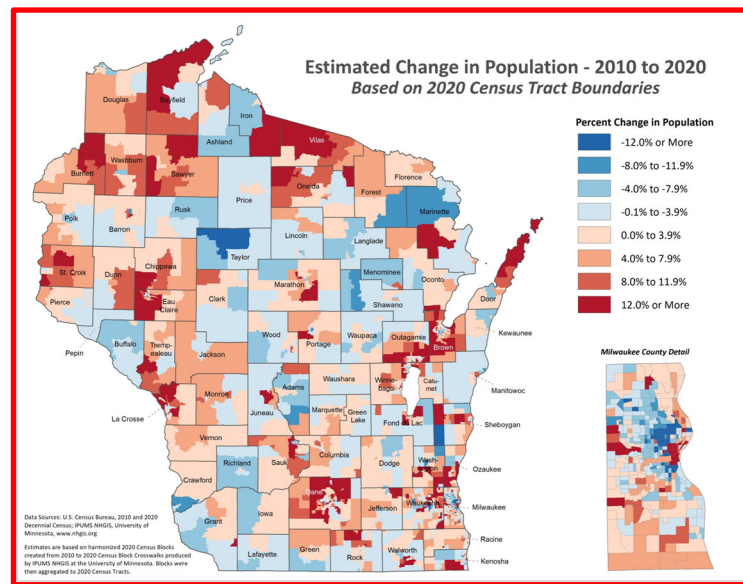
These four towns have been inundated by seasonal property owners who escaped their permanent homes in more populated areas and have spent much more time at their Vilas County properties. This influx of people has greatly stressed existing DSL networks, reducing speeds and increasing latency. Many of the DSL nodes are full so this project is critical to providing both full and part-time Arbor Vitae residents, remote workers, and its businesses fast, reliable high-speed broadband. The same applies in Cloverland, Conover, and Lincoln.

One of VCEDC's core strategies has been recruiting remote workers. The one essential item they need is high-speed broadband. Without it, they cannot work and share their wealth. Has VCEDC's strategy worked? The data says yes, but expanded broadband is required.

Data Summary						
Data Point	Vilas County	Arbor Vitae	Cloverland	Conover	Lincoln	4 Town Total
Population	23,047	3,586	1,089	1,267	2,659	8,601 (37.3%)
Population Growth 2010 - 2020	7.5%	2.6%	3.7%	2.4%	10%	
Population Growth 2020 - 2021	1.19%	5%	1.8%	Flat	?	
Median Age	56	50.1	42.6	55.9	45	
Population >65	30.8%	21.7%	13.8%	20.4%	21.3%	
Population <18	16.9%	20.8%	28.7%	21.9%	20.3%	
Population Density	25/Sq Mile	58/Sq. Mile	23.6/Sq. Mile	15/Sq. Mile	79.2/Sq. Mile	
Size in Square Miles	1,018 Sq. Miles	61.5 Sq. Miles	46.2 Sq. Miles	87.2 Sq. Miles	37.2 Sq. Miles	
Median HH Income	\$47,072	\$42,088	\$48,685	\$54,943	\$47,136	

From 2010 to 2020 Wisconsin's population grew 3.6-percent. The table above shows significant growth in the four towns included in Charter Communication's project. Led by the Town of Lincoln, this population growth is impressive. Arbor Vitae's 2020 to 2021 growth of 5-percent is incredible! Each of these new arrivals require high-speed broadband. The Wisconsin Public Service Commission can tremendously contribute to this economic growth by approving Charter Communication's Vilas County grant application.

Finally, Vilas County's population growth over the past 11 years has stood out. According to a University of Minnesota study of 2020 Census data, Vilas County did not have one Census tract that decreased in population.



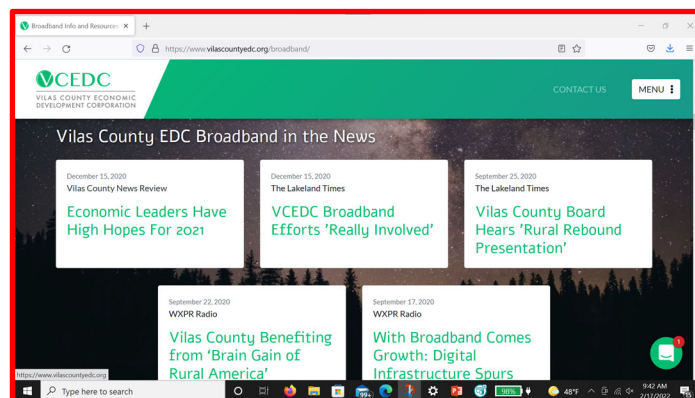
What has driven the growth? Many factors, but a significant one is Vilas County's strategy to make it a *High-Speed Broadband* destination, especially for remote workers.

- How the speeds and service being offered by the project fits with current and future economic needs of the community and local businesses.

In 2020, VCEDC defined a strategy to make Vilas County a *Broadband Destination* creating an inviting and successful community for remote workers, entrepreneurs, and new and expanding businesses while maintaining a healthy business climate for existing businesses. The VCEDC has taken a Vilas-first approach to expanding broadband and ISPs have responded.

VCEDC's community outreach and communications have paid dividends. Kathy Schmitz's, VCEDC's Executive Director, has a background in communications and media and with her contacts Vilas County's broadband initiatives have received tremendous media attention.

Here are some headlines posted to the [VCEDC website](https://www.vilascountyedc.org/broadband/).



Approximately 90-percent of Vilas County's economy is based upon tourism. That is great when the tourism industry is booming, but when it is not, it causes economic hardship. VCEDC's strategy is to grow and diversify the economy while continuing to support its tourism industry thereby leveling the peaks and valleys of its tourist-based economy.

High-speed broadband is the key to diversifying the economy. Remote workers, entrepreneurs, and new and expanding businesses that are environmentally compatible with Vilas County are the targets.

Keeping visitors in Vilas County longer or relocating permanently is the goal. Seasonal residents and visitors outnumber permanent residents by a factor of 10 so keeping them in Vilas County longer is key to economic success. According to an **August 2014 University of Wisconsin-Whitewater Economic Impact Study, Broadband and Vacation Properties**, seasonal residents spend \$74 a day, or \$89 in 2022 dollars. If a person stays for an additional month, that single person adds an additional \$2,670 to the economy. If 10,000 people stay a month longer, **\$26,700,000** is injected into the local economy!

- How the proposed project will affect the ability of individuals to access health care service from home, including any impact upon the costs of those services.

Before COVID-19, Tele-Health was growing. During COVID-19 it became a necessity. Today, it is a broadly accepted and necessary health care tool.

Marshfield Clinic Health System is a leader in Tele-Health. They know the future of health care delivery in Vilas County is through Tele-Health. Especially with Vilas County's aging population and winter weather, Tele-Health is a safe and cost-effective option for health care.

According to Chris Meyer, Director of Virtual Care/Tele-Health at Marshfield Clinic Health System, of the 17,564 tele-health visits through their Minocqua facility (services Vilas County) only 5,982 of those visits were via video (the preferred method). The 34-percent rate of tele-health visits in this region is 16-percent lower than throughout the Marshfield Clinic Health System, which is 50-percent. The primary reason is the lack of high-speed broadband, which is required for video visits. Tele-health is here to stay because Marshfield Clinic Health System saw a four percent increase year-over-year 2020 to 2021.

What is needed to improve tele-health visits in Vilas County? A fast and reliable broadband connection. This project will provide that connection to another 1,000 homes and businesses.

Marshfield Clinic Health System's CEO Susan Turney, MD, explains it best (see below). They also actively investing in high-speed broadband with a \$20,000 pledge for this project!



**Marshfield Clinic
Health System**

Marshfield Medical Center
1000 North Oak Avenue
Marshfield, WI 54449

March 1, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support/Commitment for the Vilas County EDC Broadband Expansion Grant proposal

Marshfield Clinic is an integrated health system located in Marshfield, WI serving central, north-central and north-western Wisconsin, this includes patients who reside in Vilas County. We are a Mission, Vision and Value's driven organization that strives to "Enrich the Lives of those we serve". MCHS has used Telehealth to reach unserved and underserved populations throughout Wisconsin since 1997.

MCHS is supportive of the efforts of this proposed project by the Vilas County Economic Development Corporation in partnership with Charter Communications and the towns of Arbor Vitae, Cloverland, Conover and Lincoln and offer this letter of support and commitment for their grant application. Further, Marshfield Clinic Health System will contribute \$20,000 to the Vilas County Economic Development Corporation toward this project if it is awarded grant funds by the Public Service Commission. This is a significant project that impacts over 1,000 homes and businesses.

Over the course of the last 6 years, MCHS has worked closely with the communities we serve in an effort to help them prepare for a time in which more healthcare can be delivered using technology directly into the patient's home. The COVID-19 Pandemic accelerated the move to delivering care via telehealth much more quickly than expected. However, Telehealth was able to respond quickly and offer continued access to healthcare services by our patients throughout the Pandemic. Since March of 2020, MCHS has completed over 400,000 telehealth encounters that were not permissible prior to the Pandemic. Despite the rapid advancement of Telehealth, access to broadband internet services continue to be our patient's top barrier in accessing these services.

Looking forward to a Post-COVID world, Telehealth is not going away. Federal legislation is expected to make these new flexibilities to use telehealth permanent. Telehealth visits allow patients better access to healthcare without the need to travel or miss work or school. This allows patients to more conveniently maintain their chronic illness appointments, have a visit with their Primary Care Doctor or complete needed follow-up care. A number of new services are likely to join the array of telehealth services already offered by health systems across the country. A patient's access to broadband at home will be a determining factor in which services they can consume and which they cannot. MCHS will be at the forefront of offering these new care modalities.

Collaborative efforts are needed to expand broadband across Wisconsin and MCHS is proud to support this Broadband expansion project and we urge the Public Service Commission to fund this project.

Sincerely,

Susan Turney MD, MS, FACP, FACMPE
CEO

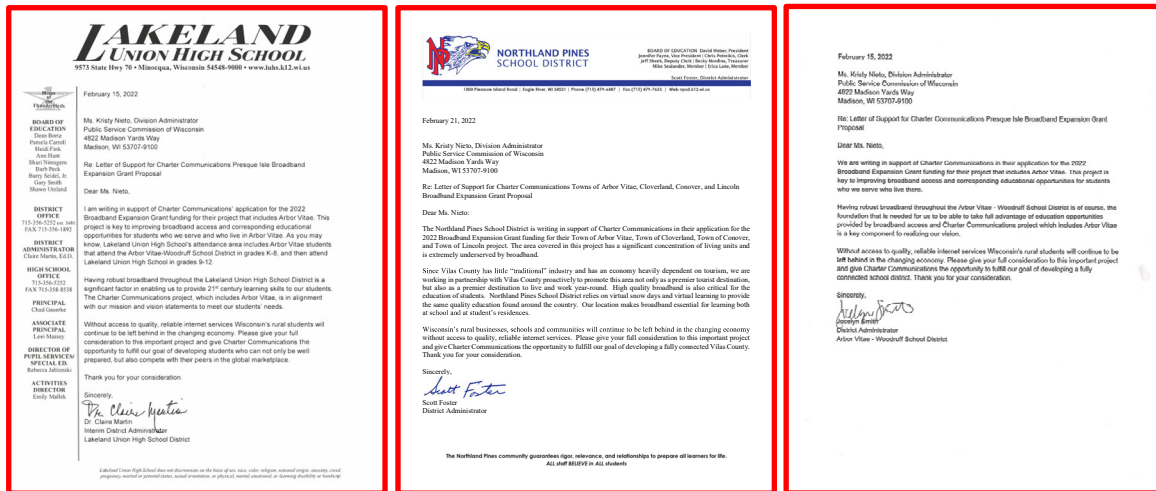
- How the proposed project will affect the ability of students to access educational opportunities from home.

Like tele-health, tele-education needs were growing before COVID-19 struck. Instantaneously, schools in Vilas County had to pivot to e-learning. Unfortunately, many of those students lacked sufficient broadband to continue their learning. Students and parents were innovative about the way they attempted to get a broadband connection. One parent who emailed VCEDC Executive Director Kathy Schmitz said she took her child to McDonald's nightly to use their WiFi and sat in the car so the student could do her homework. Another Town of Cloverland family was forced to send their teenage son to live with relatives who had broadband so he could continue his education. That is unacceptable!

COVID-19 has changed forever the channels and methods of education. High-speed broadband is the vital ingredient to this new mode of education.

For adults, institutions of higher education ranging from Purdue University to the University of Phoenix are offering online courses and degrees that are only possible because of high-speed broadband. Undergraduate and graduate students can stay at home while earning their degrees.

Lakeland Union Highschool Interim Administrator Dr. Claire Martin, Northland Pines School District Administrator Scott Foster, and Arbor Vitae – Woodruff School District Administrator Jocelyn Smith understand and effectively convey the need for fast and reliable broadband in their accompanying support letters. This project in Vilas County will bring precious broadband to many students who will be able to access the learning tools needed for them to develop into productive, successful adults.



A description of how the proposed project will affect the ability of individuals to access health care service from home, including any impact upon the costs of those services.

Charter's proposed FTTP network is well suited for bandwidth-intensive applications like telemedicine. Charter's FTTP network would enable customers to engage in virtual doctor visits without leaving their homes. Accordingly, telehealth is a promising approach to reduce health disparities in rural communities by bringing specialized healthcare to these communities where such care was previously unavailable. Telehealth also facilitates monitoring and follow-up care for chronic health conditions, and connecting providers in remote areas, mental health services, and access to online pharmacies. Local public health departments can also leverage telehealth approaches to better serve their communities.

g. Effect upon broadband service to adjacent areas

This proposed project will not impair the ability of a broadband service provider or competing broadband service provider to extend broadband service to areas adjacent to the proposed project area. Combined with our RDOF commitments, if awarded, this project would serve what we believe are all the remaining unserved or underserved households and businesses in the Towns of Arbor Vitae, Cloverland, Conover, and Lincoln.

III. Additional information supporting the application

a. Charter's History and Experience

Across the nation and in Wisconsin, Charter is a leading connectivity company providing superior products and services through its Spectrum brand of services and investing in the infrastructure, technology, and people powering the future. Charter is at the intersection of technology and

entertainment, facilitating communications that connect more than 32 million residential and business customers in 41 states. Charter's commitment to serving customers and exceeding their expectations is the bedrock of Spectrum's business strategy and is the philosophy that guides its 93,000+ employees (that includes the approximately 3,600 employees who call Wisconsin home).

Nationally, Charter is the second largest broadband provider. The company has achieved growth through innovation and acquisitions of cable properties, including completing transactions with Time Warner Cable and Bright House Networks. U.S. News and World Report recently named Spectrum Internet as the **"Best Internet Service Provider for Rural Areas."**⁹ Charter's commitment to service quality has resulted in Multichannel News naming its Spectrum brand as **Operator of the Year for 2020**, CableFax naming us **"2021 MSO of the Year,"**¹⁰ and CNET naming Spectrum the **"Best Cable Internet Provider"** for 2022.¹¹ Spectrum's unparalleled commitment to service quality was especially evident in response to the pandemic. Charter's network continued to perform well despite higher levels of peak bandwidth usage. And Charter accomplished all this while making adjustments to how and where we worked in response to COVID protocols.

Charter has invested nearly \$40 billion in infrastructure and technology over the last five years as part of its long-term commitment to expanding broadband access across urban, suburban and rural areas to connect more Americans. From 2018-2020 alone, Charter extended its network to reach an additional 2.5 million new homes and businesses, about a third in rural areas. Charter has recently announced a \$5 billion dollar initiative through RDOF to connect more than a million currently-unserved, mostly rural families and small businesses to reliable broadband service with speeds of up to 1 gigabit per second, including adding significant resources to its construction department focused solely on adding nearly 115,000 miles of new network infrastructure to its more than 750,000 existing miles. Charter also plans to hire more than 2,000 employees and contractors to support the expansion nationwide. Wisconsin is the state where Charter received its largest RDOF award.

Charter will use the same network deployment and operational procedures in the Project Area that are currently successfully employed across the country. These practices include documented and thoroughly tested methods of managing network performance, managing service issues at a network or customer level, and coordinating change management with minimal or no disruption to customers. All of Charter's services are delivered over its state-of-the-art network and Charter backs them up with professional customer service and support from local technicians. Charter is dedicated to bringing its clients innovative, reliable services, and responsible care.

In Wisconsin, Charter (and its predecessor companies) have been providing broadband internet service for decades. Charter currently serves over 800 communities in Wisconsin, and provides broadband internet, video and voice service to more than 1.5 million customers, operating more than 40,000 miles of plant. In 2021 Charter began its commitment to build more than 140,000 new, unserved locations in Wisconsin through RDOF. More than \$668 million will be invested in Wisconsin, which includes an expected private investment of approximately \$500 million by Charter and \$168 million in support won by Charter in the FCC's RDOF auction. For this Project, Charter will be able to draw on the experience and capabilities of its regional and local personnel building and maintaining broadband infrastructure in all of these efforts.

⁹ U.S. News and World Report, *Best Internet Providers for Rural Areas* (July 8, 2021), <https://www.usnews.com/360-reviews/internet-providers/best-rural>

¹⁰ <https://www.cablefax.com/event/2021-cablefax-top-ops>

¹¹ <https://www.cnet.com/home/internet/best-cable-internet/>

As stated above, Charter has extensive experience building new network across 41 states every year, including deployment of its network into unserved rural areas, is well informed and practiced in adhering to required permitting processes and laws, and has well-established procedures to ensure that its networks are always constructed consistent with all applicable legal and regulatory requirements.

Charter's construction project management system, called PRISM, contains an exhaustive guided workflow to manage all aspects of the construction process, including all necessary federal, state, and/or local governmental permits and approvals. The PRISM permit module enforces strict adherence to permitting rules, ensuring that steps in construction do not proceed without verified and approved permit documentation present in the system. Training is conducted frequently by a dedicated training group in Charter's Field Engineering support organization to ensure Charter's Construction Coordinators are well versed on the business processes and systemic solutions that projects are managed effectively and efficiently.

Prior broadband expansion projects

Charter recognizes the importance of extending broadband service to unserved and underserved rural Wisconsin. Since 2014, Charter has actively participated in the Wisconsin Public Service Commission State Broadband Grant Program and has received 17 broadband grant awards. Twelve of these grant projects have been completed and of the remaining five, one is expected to be completed in the spring of 2022 and the remaining four are expected to be completed by December 31, 2024. Through these public-private projects, thousands of previously unserved and underserved residents now have access to broadband.

The below chart provides a list of our successful public/private broadband expansion efforts in Wisconsin since 2018.

COMPLETED PROJECTS

Area	County	Community	Residential and Business Locations added	Activation date	Technology Used	Grant or Full Spectrum Investment
Pardeeville	Columbia	Village of Pardeeville	1045	Jun 2018	Hybrid Fiber Coax	Full Spectrum Investment
Dunn	Dane	Town of Dunn	117	Jun 2018	Hybrid Fiber Coax	State BB Grant
Fall River	Columbia	Village of Fall River	780	Mar 2019	Hybrid Fiber Coax	Full Spectrum Investment
King	Lincoln	Town of King	323	Jan 2020	Hybrid Fiber Coax	State BB Grant
Monticello	Green	Village of Monticello	567	Feb 2020	Hybrid Fiber Coax	Full Spectrum Investment
Orfordville & Footville	Rock	Villages of Orfordville & Footville	843	July 2020	Hybrid Fiber Coax	Full Spectrum Investment
Menominee	Menominee	Menominee Tribe	210	Dec 2020	FTTP	CARES Act Grant
Walter Dr - Woodruff	Oneida	Town of Woodruff	68	Dec 2020	Hybrid Fiber Coax	State BB Grant

Anson	Chippewa	Town of Anson	57	Dec 2020	Hybrid Fiber Coax	State BB Grant
Aedan Egan-Belgium	Ozaukee	Village of Belgium	19	Feb 2021	Hybrid Fiber Coax	State BB Grant
Strawberry Glen – Jackson	Washington	Town of Jackson	46	Feb 2021	Hybrid Fiber Coax	State BB Grant
Fairwater – Ripon	Fond du Lac	Town of Ripon	185	May 2021	Hybrid Fiber Coax	State BB Grant
Lake Michigan Dr – Sturgeon Bay	Door	Sturgeon Bay	134	Jun 2021	FTTP	State BB Grant
Marquette	Green Lake	Village of Marquette	164	Aug 2021	Hybrid Fiber Coax	State BB Grant
Randolph	Columbia	Village of Randolph	837	Oct 2021	Hybrid Fiber Coax	State BB Grant
Lyons	Walworth	Town of Lyons	53	Nov 2021	Hybrid Fiber Coax	State BB Grant
Menominee Phase 2	Menominee	Menominee Tribe	26	Dec 2021	FTTP	CARES Act Grant

PROJECTS IN PROGRESS

Area	County	Community	Residential and Business Locations added	Deadline to complete	Technology Used	Grant or Full Spectrum Investment
Eagle River – Silver Lake, Rangeline & Deerskin	Vilas	Towns of Washington & Lincoln	705	Summer 2022	FTTP	State BB Grant
Racine	Racine County	Countywide	2000	December 31, 2024	FTTP	State BB Grant
Kenosha	Kenosha County	Countywide	918	December 31, 2024	FTTP	State BB Grant
Walworth	Walworth County	Countywide	1648	December 31, 2024	FTTP	State BB Grant
Town of Janesville	Rock	Town of Janesville	39	December 31, 2024	FTTP	State BB Grant

b. A description of how the proposed project will or will not duplicate existing broadband infrastructure.

Charter will not build to any existing locations already served by Charter. Moreover, all of the locations proposed for the Project are either “unserved” or “underserved” as defined in Wis. Stat. § 196.504, so the Project does not duplicate any other provider’s existing infrastructure in any “served” area.

c. A description of an applicant's financial ability to undertake the proposed broadband construction project.

Charter's proposed Project budget includes only a limited set of Charter's estimated direct, verifiable costs of construction. These consist of estimated material costs; direct contractor labor to carry out design, make-ready, and construction work; and licensing/permitting expenses. Indirect costs and certain other direct costs associated with the effort—such as the contributions by Charter's internal employees on project design, supervision, and management—will be absorbed by Charter as part of its regular operations.

Once constructed, the State can also have a high degree of comfort that the Project will be sustainable. The network will also be backed and operated by Charter, the nation's second-largest broadband provider with extensive experience owning, operating, maintaining, and upgrading broadband networks, as well as well-recognized financial stability. Charter has substantial cash flow, revolver capacity, and access to the capital markets. Charter's financial resources and recognized, investment-backed commitment to rural America provide reassurance that Charter will be able to carry out the terms of any grant and continue to operate the system going forward.

Charter Communications, Inc., the company behind the customer-facing brand of Spectrum, is a Fortune 70 company with a market capitalization near \$100 billion. All portions of the project to be funded by Charter will be funded from the company's general construction budget. Full copies of Charter's most recent financials can be accessed here:

- Annual Report to Shareholders: <https://ir.charter.com/financial-information/annual-reports>
- SEC Filings: <https://ir.charter.com/financial-information/sec-filings>
- Annual Form 10-K for year ended December 31, 2021: <https://ir.charter.com/static-files/63606f63-1b11-4d60-91a0-5395f1552592>

Charter funds its construction projects using a centralized holding company planning model. For the proposed Project, Charter will aggregate needs and accumulate funds at the holding company level using a mix of available funding pools, including ongoing business free cash flow, existing credit lines, and new bond issuances, which could include high yield or investment grade bonds similar to those in our debt structure today. Our goal is to mix these resources as efficiently as possible. We continually evaluate our collective funding need and utilize funding mechanisms based on what is currently most advantageous for Charter. Our centralized funding entities will then disperse funds to the Charter affiliate participating in the Project to fund the Project on an as needed basis.

Charter has more than adequate cash flow to meet all Project obligations, including both initial construction and ongoing operation of the proposed network. Charter's free cash flow generally reflects the cash flow from our business that is available for investment, debt repayment, or for distribution to our shareholders in a given year. Free cash flow has already been reduced for our expected interest payments and normal capital expenditures. Charter's free cash flow in 2018, 2019, 2020, and 2021 was \$2.2b, \$4.6b, \$7.1b, and \$8.7b, respectively. Collectively, our free cash flow, revolver capacity, and access to capital markets reflect more than sufficient resources to fund the proposed Project. In addition, consensus estimates of our ongoing free cash flow would be more than sufficient to fund our debt maturity obligations as they come due, along with allowing us to continue to operate our business, including the build-out systems.

Attached as Exhibit A are 21 additional documents received in support of the Project.



March 17, 2022

Ms. Steffany Powell Coker
Secretary to the Commission
Public Service Commission of Wisconsin
4822 Madison Yards Way
North Tower - 6th Floor
Madison, WI 53705-9100

RE: FY 2022 BROADBAND EXPANSION GRANT APPLICATION

Dear Ms. Coker:

In response to The Fiscal Year 2022 Broadband Expansion Grant Cycle in collaboration with Spectrum Mid-America, LLC, by its manager, Charter Communications Inc. Charter ("Spectrum" or "Charter") hereby submits the enclosed Application, which we believe appropriately recognizes the urgency of the request and sets forth a straight-forward implementable plan to connect the most unserved and underserved homes utilizing the available funding.

Our proposal, if accepted, will deliver robust high speed internet with up to 1 gigabit per second ("Gbps") download and 500 megabits per second ("Mbps") upload speeds, to 965 locations identified in Spectrum's Application in Vilas County, using fiber-to-the-premises (FTTP EPON) technology.

Charter has invested nearly \$40 billion in infrastructure and technology nationally over the last five years as part of its long-term commitment to expanding broadband access across urban, suburban and rural areas to connect more Americans. In 2021, Charter extended its network to reach an additional 1.1 million new homes and businesses across the country, including an additional 41,000 in Wisconsin.

Backed by more than 3,591 local employees, \$670 Million in capital investment in Wisconsin over the last two years, and a robust gigabit capable network, we are uniquely positioned to meet your objectives in a more efficient and meaningful way than any other applicant.

Charter recognizes the urgent need for extending access to reliable broadband to all its residents. Charter, through its Spectrum brand of companies, currently serves approximately 1.5 million customers in Wisconsin, and more than 32 million customers nationwide. Over an advanced communications network, the company offers a full range of state-of-the-art residential and business services including Spectrum Internet, TV, Mobile and Voice.

Our continued commitment to providing broadband in the State is further evidenced by our 2021 announcement to build more than 140,000 unserved locations in Wisconsin through the Federal Communications Commission's Rural Digital Opportunity Fund ("RDOF") auction. More than \$668 million will be invested in Wisconsin, which includes an expected private investment of approximately \$500 million by Charter and \$168 million in support won by Charter in the FCC's RDOF auction. In Vilas County we will be building 7,449 RDOF locations.

Each day that passes without connectivity increases the gap between those who have broadband and those who do not. We believe this proposal echoes the State's strong desire to bring connectivity to unserved and underserved residents of the state. Charter is excited for the opportunity to work with the Wisconsin Public Service Commission to bring continued major investment of broadband expansion in the State.

Please find the detail of our response enclosed. Again, we are pleased to be considered for such an important and ambitious project. Thank you for your leadership on this critical issue.

Sincerely,

A handwritten signature in dark ink, appearing to read 'AR', with a stylized, flowing script.

Adam Raschka,
Regional Senior Director, Government Affairs



WISCONSIN LEGISLATURE

P. O. Box 7882 Madison, WI 53707-7882

Steffany Powell Coker
Secretary to the Commission
Public Service Commission of Wisconsin
North Tower, 6th Floor
Hill Farms State Office Building
4822 Madison Yards Way
Madison, Wisconsin 53705

March 10, 2022

Ms. Powell Coker,

Please accept this letter of support for Charter Communications' 2022 Broadband Expansion Grant application for Vilas County. Charter Communications is applying for a grant to address the internet needs of communities like Conover, Arbor Vitae, Lincoln, and Cloverland. This project aims to install fiber-to-home broadband for 992 homes and businesses, with a \$6,600,706 build cost overall. Broadband expansion is critical to the Northwoods, and we strongly believe they would make excellent use of the grant funding.

This grant will level the playing field and help provide much needed broadband access to Northwoods businesses, homes, and schools. Broadband expansion will attract new businesses, enhance tourism experiences, promote student educational opportunities, and address health and safety issues in remote areas.

Many residents in the Northwoods continue to rely on dial-up connections in their homes and businesses. Our offices have heard from several concerned parents and college students regarding their inability to effectively complete online homework assignments due to their internet connectivity. This places students in the Northwoods at a distinct disadvantage.

The Broadband Expansion Grant is an important step towards leveling the field and increasing educational and economic development in Vilas County. We are confident that Charter Communications will prove to be an excellent partner in the implementation of the project.

Sincerely,

Representative Rob Swearingen
34th Assembly District
Wisconsin State Assembly

Senator Mary Felzkowski
12th Senate District
Wisconsin State Senate

EAGLE RIVER ANIMAL HOSPITAL
1720 Hwy 45 N, Eagle River, WI 54521



LOCAL • DEDICATED • PROFESSIONAL
715-479-7090 • www.eaglerivervet.com

February 18, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support for Charter Communications Town of Lincoln Broadband
Expansion Grant Proposal

Dear Ms. Nieto,

We are writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Town of Lincoln project. The area covered in this project has a significant concentration of living units and is very underserved by broadband.

Having little "traditional" industry, and an economy heavily dependent on tourism, Vilas County is working proactively to promote ourselves not only as a premier tourist destination, but as a premier destination to live and work year-round. Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project in the Town of Lincoln is a key component to realizing Vilas County's vision.

Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind in the changing economy. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

Sincerely,

Katie Hony DVM



Passion for excellence.
Compassion for people.

2200 Westwood Drive, PO Box 1395, Wausau, WI 54401
715.847.2118 | 800.283.2881 | aspirus.org

March 14, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support for Charter Communications Vilas County Broadband Expansion Grant Proposal

Dear Ms. Nieto,

We are writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Vilas County project. The area covered in this project is very underserved by broadband and includes the towns of Arbor Vitae, Cloverland, Conover, and Lincoln. This project will bring fiber broadband service to roughly 1,000 homes.

Having little "traditional" industry, and an economy heavily dependent on tourism, Vilas County is working proactively to promote themselves not only as a premier tourist destination, but as a premier destination to live and work year-round. Robust broadband is of course also critical to Aspirus Health tele health initiatives which are key to providing needed health care services in the Northwoods. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project in Vilas County is a key component to realizing our vision.

Without access to quality, reliable internet services Wisconsin's rural communities will continue to be left behind in the changing economy. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

Sincerely,

Wade Carroll
VP, Information Technology
Aspirus Inc.



February 25, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support for Charter Communications Town of Lincoln Broadband Expansion Grant Proposal

Dear Ms. Nieto,


We are writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Town of Lincoln project. The area covered in this project has a significant concentration of living units and is very underserved by broadband.

Having little "traditional" industry, and an economy heavily dependent on tourism, Vilas County is working proactively to promote ourselves not only as a premier tourist destination, but as a premier destination to live and work year-round. Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project in the Town of Lincoln is a key component to realizing Vilas County's vision.

Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind in the changing economy. This means that the children of underemployed families are also left behind. A robust broadband solution in the town of Lincoln will have an impact of childhood food insecurity.

Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

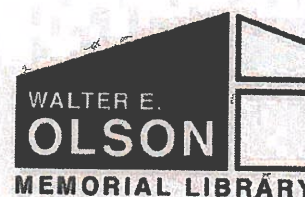
Sincerely,


President

Feed Our Rural Kids • 4887 Echo Ridge Dr • Eagle River, WI 54521

March 2, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100



Re: Letter of Support for Charter Communications Town of Lincoln Broadband Expansion Grant Proposal

Dear Ms. Nieto,

I am writing on behalf of the Walter E. Olson Memorial Library in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Town of Lincoln project. The area covered in this project has a significant concentration of residents with extremely limited access to broadband. The Library is one of the few reliable sources of public broadband, and we know that we do not begin to meet the needs of our service area.

Our community members need robust broadband connectivity for in order to participate in essential services such as health care, educational opportunities, workforce development, and more. In addition, as we have seen throughout the pandemic, high speed connectivity is vital to the working life of a community. With an economy that has traditionally been heavily dependent on tourism, Vilas County is working proactively also establish a reputation as a premier destination to live and work year-round. Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is, of course, foundational to this goal and Charter Communications project in the Town of Lincoln is a key component to realizing Vilas County's vision.

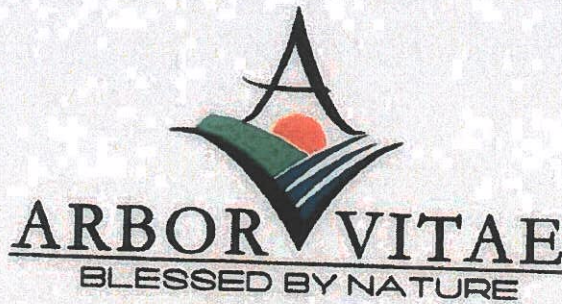
Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind – and left out of – the changing economy and essential services. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sara Klemann".

Sara Klemann (she/her/hers)
Director, Walter E. Olson Memorial Library
director@olsonlibrary.org
715-479-8070

P.O. Box, 203 N. Main Street
Eagle River, WI 54521
www.olsonlibrary.org



VILAS COUNTY
10675 Big Arbor Vitae Drive
Arbor Vitae, WI 54568
(715) 356-3120 • FAX (715) 356-1071
www.townofarborvitae.org

March 8, 2022


Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

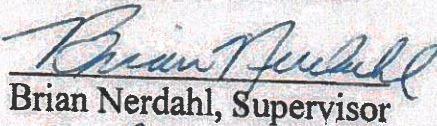
Ms. Nieto,

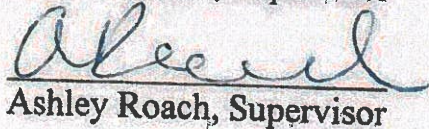
Like many rural communities in Wisconsin and across the country, much of the Town of Arbor Vitae has limited options for access to high speed internet. Arbor Vitae is the second largest town in Vilas County and covers over 88 square miles, with a significant portion of residents of our community lacking the business, education, and recreational opportunities that those with broadband have.

As a sign that the Town of Arbor Vitae is committed to expanding broadband in our community we have joined with 3 other towns in our county, Vilas County and Charter Communications to partner with Wisconsin Public Service Commission Broadband Grant project and pledge \$250,000.00 from the Town of Arbor Vitae in support of broadband expansion. Thank you in advance for your consideration.

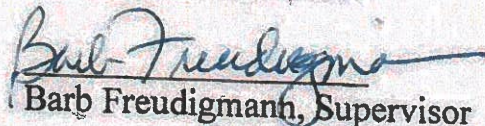
Sincerely,


Frank Bauers, Chairman


Brian Nerdahl, Supervisor


Ashley Roach, Supervisor


Jeff Hunter, Supervisor


Barb Freudigman, Supervisor



Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

March 10, 2022

Re: Letter of Support for Charter Communications Town of Cloverland Broadband Expansion Grant Proposal

Dear Ms. Nieto,

We are writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Town of Cloverland project. The area covered in this project has a significant concentration of living units and is very underserved by broadband. Many of the proposed passings they propose to add with their grant application, were not included in the awards to either Charter Communications or LTD (based on the RDOF maps).

Having little "traditional" industry in our town, and an economy heavily dependent on tourism, Vilas County is working proactively to promote ourselves not only as a premier tourist destination, but as a premier destination to live and work year-round. This is particularly true for the Town of Cloverland, which is predominately a residential, rural community. We have a few family run businesses for logging, landscaping, a few family-owned seasonal resorts, a kayak/canoe rental on the Wisconsin River and a restaurant.

Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project in the Town of Cloverland is a key component to realizing Vilas County's vision. We are becoming a key "bedroom community" to attract these entrepreneurs and remote workers.

Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind in the changing economy. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

Sincerely,

Scott Maciosek
Chairman - Town of Cloverland Board



Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

March 10, 2022

Re: Financial Support for Broadband Grant
Dear Ms. Nieto,

Subsequent to the support letter sent by Cloverland Chairman Scott Maciosek, this letter is to notify you that the Board passed a motion at a special meeting today, to assign \$50,000 of our ARPA funds to the grant application being filed on our behalf by Charter Communications.

With this support we are committing virtually half of our ARPA funds in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for the Town of Cloverland.

They have already requested four right of way easements to cover a large portion of their Phase 1 RDOF area. This has shown their significant commitment to Cloverland as a provider of internet services.

Many families with school age children will be relieved to hear this for both remote learning and home schooling, which has been difficult during the pandemic. Also, our remote workers, both full time and part time will benefit by the improved service. Our seasonal resident-owners will be able to extend their time at their properties by extending their visits while keeping up with their work responsibilities.

Thank you for your consideration of our part of the multi-municipal grant application that Charter Communications is filing on our behalf.

Sincerely,

Joe Spitz

Town of Cloverland Board Supervisor #4

cc: Tracy Schilling – Cloverland Town Clerk

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Dear Kristy,

This letter is to report to VCEDC the action approved by the Town of Conover Board of Supervisors at its regular meeting on March 10, 2022.

Specifically, the Board of Supervisors approved providing financial support to the special broadband project to deliver FTTP to 139 passings in a section of Conover not included in the Federally funded RDOF initiative. A total of \$33,076. has been approved.

Please contact me if you have any questions.



Joseph Muehlbach
Town of Conover, Supervisor 1

Cc: Kathy Schmitz, Executive Director, Vilas County Economic Development Corporation
Kendra Lederer, Clerk, Town of Conover
Joseph Fritzsche, Broadband Committee, Town of Conover
Dale Mayo, Supervisor, Town of Conover

**Town of Conover Board of Supervisors
Conover Wisconsin
Resolution 209-22
Broadband Initiative Support**

Whereas the Board of Supervisors of the Town of Conover in Vilas County Wisconsin desires to improve and expand the availability and speed of broadband service available to the residents of Conover - both full time and seasonal - as well as business establishments and visitors; and,

Whereas the Board of Supervisors (Board) of the Town of Conover Wisconsin (Town) established the Broadband Committee (Committee) as an *ad hoc* committee of the Town Board and charged the Committee with investigating opportunities to improve and expand broadband services within the Town of Conover and to make strategy and action recommendations to the Town Board regarding broadband; and,

Whereas the Town demonstrated its commitment to improving broadband by applying for a *Telecommuted Forward!* certification from the Wisconsin Broadband Office, a Division of the Wisconsin Public Service Commission (WI-PSC), and recently received notice that the sought-after certification was awarded; and,

Whereas Charter Communications has been awarded a significant grant from the Rural Digital Opportunity Fund (RDOF) - a Federal program - to install broadband Fiber-To-The-Premises (FTTP) in the major portion of the Town; and

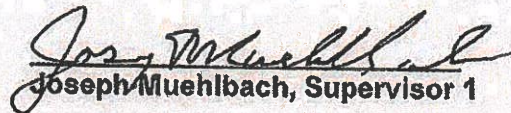
Whereas the Committee has reviewed and discussed available detail about the RDOF project in Conover and based on their review and discussions, the Committee has presented the Board with a report on the Charter Communications project, including a recommendation that the Board support the Charter initiative;

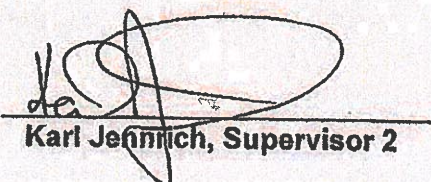
Now Therefore Be It Resolved that the Conover Board of Supervisors does, by this resolution, officially records its support for the RDOF funded project by Charter Communications to improve and expand broadband service in the Town; and,

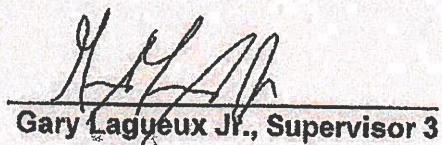
Be It Further Resolved that the Board will, to the extent possible, assist with the execution of the Charter project including the timely approval of Right-Of-Ways as well as other actions as the Town as deem to be appropriate and in the best interest of Conover and its residents.

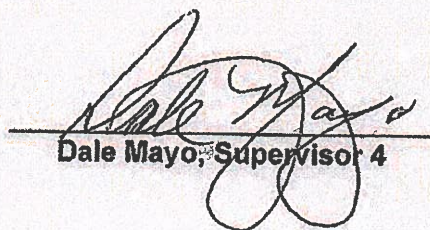
Signed This Day, February ,2022


George Champeny, Chairman


Joseph Muehlbach, Supervisor 1


Karl Jennrich, Supervisor 2


Gary Lagyeux Jr., Supervisor 3


Dale Mayo, Supervisor 4

**RESOLUTION IN SUPPORT OF BROADBAND EXPANSION BY APPLICATION TO THE
PUBLIC SERVICE COMMISSION OF WISCONSIN UNDER THE ELIGIBILITY
REQUIREMENTS SET FORTH IN WIS. STAT. ss13.48(30)**

AT A MEETING OF THE Town of Lincoln HELD AT 6:30PM, ON MARCH 8, 2022.

**RESOLUTION - IN SUPPORT OF BROADBAND EXPANSION BY APPLICATION TO THE
PUBLIC SERVICE COMMISSION OF WISCONSIN UNDER THE ELIGIBILITY
REQUIREMENTS SET FORTH IN WIS. STAT. ss13.48(30)**

WHEREAS, the Town of Lincoln has been asked to and desires to participate in a grant process in conjunction with the Vilas County Economic Development Corporation (VCEDC), the Public Service Commission of Wisconsin (PSC) and Charter Communications an area internet service provider (ISP), that is due to the PSC on March 17, 2022.

WHEREAS, the Town Board of the Town of Lincoln recognized the importance of providing Highspeed Broadband access those parts of the town that are most in need of assistance;

WHEREAS, the Town Board of the Town of Lincoln understands that Highspeed Broadband service will diversify the Town's economy, offer a new home for high-tech businesses encourage young families to settle in the Town stabilize and secure the future of its local elementary, middle and high schools, and allow the full utilization of Tele-Health/Tele-Medicine and Tele-Education

WHEREAS, the Town of Lincoln contemplates the following use of funds by the project if accepted:

Project Cost	\$1,849,246
Charter Contribution	\$ 834,010
Town of Lincoln Contribution	\$. 130,000
Outside Community Partner	\$. 5,000

WHEREAS, the Town of Lincoln understands that, if the grant is accepted, the project will be approximately 2 years in duration and that payment to Charter Communications by the Town of Lincoln for its portion is not due until the completion of the project. Should there be a requirement to disburse the Town of Lincoln's contribution prior to the project completion (as required by the designated funds) Charter can accept payment early.

NOW, THEREFORE, BE IT RESOLVED, that this resolution has been discussed, voted on and approved.

Passed on March 8, 2022 by the Town Board of the Town of Lincoln.

Brian F. Littlech
Acting Town Chair

March 08, 2022



VILAS COUNTY ECONOMIC
DEVELOPMENT CORPORATION

involve. invest. innovate.

PO Box 1621
521 E. Wall Street
Eagle River, Wisconsin 54521
715.337.0061 | vilascountyedc.org

CHAIRMAN

Jim Tuckwell

March 10, 2022

VICE CHAIRMAN

Richard Nelson

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

TREASURER

Jon Chamberlain

SECRETARY

Elizabeth Duemmel

Re: Letter of Support for Charter Communications Vilas County Broadband
Expansion Grant Proposal

DIRECTORS

Stefan Anderson

Mike Cady

Emerson Coy

Bob Egan

Ty Erickson

Brad Gauthier

Denise Jantzen

Dave Juday

Patty Krarup

Noah Lottig

Bill Niemuth

Carolyn Ritter

April Welch

Dear Ms. Nieto,

We are writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Vilas County project and are pledging \$250. The area covered in this project spans the towns of Arbor Vitae, Cloverland, Conover and Lincoln which have a significant concentration of living units and is very underserved by broadband.

Having little "traditional" industry, and an economy heavily dependent on tourism, Vilas County is working proactively to promote ourselves not only as a premier tourist destination, but as a premier destination to live and work year-round. Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project is a key component to realizing Vilas County's vision.

Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind in the changing economy. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

EX OFFICIO

MEMBERS

Kate Ferrel

Jim Rosenberg

EXECUTIVE

DIRECTOR

Kathy Schmitz

BUSINESS

OUTREACH

SPECIALIST

Marisue Drumm

PROFESSIONAL

VOLUNTEERS

Jeff Currie

Mike Duening

Jonathan Sharp

Sincerely,

Jim Tuckwell - Chairman, VCEDC



Vilas County Board of Supervisors

330 Court Street • Eagle River, WI 54521

715-479-3600 • Fax: 715-479-3605 • www.vilascountywi.gov

March 1, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support for Charter Communications Vilas County Broadband Expansion Grant Proposal

Dear Ms. Nieto,

I am writing on behalf of Vilas County in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Vilas County project covering the towns of Arbor Vitae, Cloverland, Conover, and Lincoln. The areas covered in this project have a significant concentration of living units and are very underserved by broadband. I will encourage the Vilas County Finance & Budget Committee and the County Board of Supervisors to take appropriate action during the 2023 budgeting process, to enable the County to participate financially in this initiative.

Having little "traditional" industry, and an economy heavily dependent on tourism, Vilas County is working proactively to promote itself not only as a premier tourist destination, but as a premier destination to live and work year-round. Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project in Vilas County is a key component to realizing Vilas County's vision.

Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind in the changing economy. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ron De Bruyne", is written over the typed name.

Ron De Bruyne
Chairman - Vilas County Board of Supervisors

February 21, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Dear Ms. Nieto,

I am pleased to be writing a letter of support for the Town of Conover's application to the Broadband Expansion Grant Program. We strongly support the deployment of advanced telecommunications capabilities in Conover and the surrounding areas.

The ability to attract new businesses and assist existing businesses with quality Internet service in our community is vital in today's technology world. Communicating with our members through e-mailed newsletters improves the distribution of information. This is difficult with the current service available.

As an organization our goal is to work together with local businesses to build a healthy economy and improve the quality of life in our community. We believe the improvements in the quality of the broadband service in Conover is vital to our goal.

Sincerely,



Jacki Hildebrandt
President
Conover Chamber of Commerce

PIONEER LAKE ASSOCIATION

P.O. Box 143 • Conover, Wisconsin, 54519 • pioneerlakeassociation@gmail.com

February 24, 2022

RE: Broadband Grant Expansion Program

To Whom It May Concern:

The Pioneer Lake Association would like to express strong support for the grant application being submitted by Charter Communications in partnership with the Town of Conover.

Landowners, both resident, seasonal as well as businesses around Pioneer Lake along with other Northern Wisconsin residents should have access to reliable broadband access. The necessity of modern technology offers a huge boost to economic development and tourism, which the community relies upon. The ability to offer strong Internet in the area could attract new business and provide better support for existing business.

Additionally the area would benefit from services offered by Charter Communications by providing consistent youth educational online options, access to medical support via online health portals as well as an opportunity to be connected to enrichment or available streaming activities worldwide.

The past two years have changed the employment picture for many companies and workers. The parameters for working from home have offered advantageous opportunities to families. Unreliable internet access in the area often impacts the at-home workforce with slow and loss connectivity.

There are many parcels on Pioneer Lake would benefit from reliable Broadband services as result of the Charter grant application.

Respectfully submitted on behalf of Pioneer Lake Association

Mary Finlay
Pioneer Lake Association Secretary

To Whom it may Concern:

The town of Arbor Vitae would like to be considered for grant funding to help improve access to high speed internet for our citizens, visitors and businesses. With a population of about 3,300 people, there are people of all ages that would benefit from faster connectivity. This population swells to nearly 10,000 in the summer months. Unfortunately, the Northernmost 7 miles of our township lack property internet speeds to bring people to these areas. There are multiple reasons to get funding for underground fiber to properly connect this part of the community. We have been collecting statements from multiple members of the community who voiced their opinion on the lack of proper broadband to these areas.

Amanda Passow, a full time resident living only 2 miles outside of the main town area. She is currently using a satellite internet provider at an elevated cost, just to be able to make phone calls over wi-fi and get a few television channels. Her and her husband also run a business that would greatly benefit from a solid connection to get invoices out to customers promptly. "Being able to look something up, knowing it will be there would be a huge benefit." Amanda says. "We have such unreliable service because only one device can run at a time. When the internet runs slow, it uses data faster and we have to pay for extra fees. It is so frustrating to have Spectrum across the highway and all we have is the dish for this side of the road." Amanda and her neighbors have been looking for answers to these issues with no resolution. She hopes that her and all her neighbors can get someone to help them get with the 21st century.

Bill and Leah Trojan live just a couple miles away from Highway 70 East and also had to look for unconventional internet connections in their home. Bill says, "When we shopped for our house, it was hard to find a place with good internet and cell coverage. We found the house we wanted, sacrificed the internet and [deal with] so so cell coverage." In today's world, being connected to the internet should not be considered a luxury. It is considered a utility standard for those working or learning from home.

Sue Mitchler lives on Deerwood Lane and works in Minocqua at the Marshfield Health Center as an orthopedic physician's assistant. She frequently is on call for trauma and emergency cases. She stated that she, "often can not connect for on-call" With landlines becoming old technology, cell phones are now the primary way to make a voice call. With poor cell signal, most residents are relying on their home wi-fi for a good cell phone connection. Having an unreliable connection via phone is not an option for many working adults on the North side of town.

Mary Pat Hallstrom also works from home and conveyed the need of being connected to conduct her business. Mary Pat is a designer who previously had a brick and mortar store in Minocqua to make connections with customers. Due to covid-19, she closed her store and started working

remotely with customers from her home. With her home located directly on Highway 51, near highway M, she is having difficulty getting connected.

You will also find statements attached from other residents who have been having connection issues. These people are just a small sample of the people experiencing issues with their internet in Arbor Vitae. There are so many elderly residents who need connection for medical reasons as well. Many panic and rescue button systems require a stable and strong connection to report to 911 if these people need help. With the promise of a solid connection on the North end of Arbor Vitae, we can continue to grow out infrastructure to the North. Education and business will be thrive along with our citizens.

Thank you,

Ashley Roach

Town of Arbor Vitae Supervisor

ashleymroach@outlook.com

715-892-6225

March 10, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53707-9100

Re: Letter of Support for Charter Communications Town of Lincoln Broadband
Expansion Grant Proposal

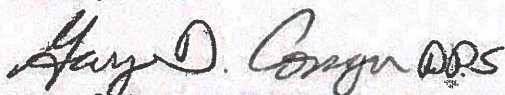
Dear Ms. Nieto,

We are writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Town of Lincoln project. The area covered in this project has a significant concentration of living units and is very underserved by broadband.

Having little "traditional" industry, and an economy heavily dependent on tourism, Vilas County is working proactively to promote ourselves not only as a premier tourist destination, but as a premier destination to live and work year-round. Attracting entrepreneurs, remote workers and expanding businesses to the Northwoods is key to Vilas County's future economic development. Having robust broadband throughout the county is of course, the foundation that is needed to be successful in this and Charter Communications project in the Town of Lincoln is a key component to realizing Vilas County's vision.

Without access to quality, reliable internet services Wisconsin's rural businesses and communities will continue to be left behind in the changing economy. Please give your full consideration to this important project and give Charter Communications the opportunity to fulfill our goal of developing a fully connected Vilas County. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gary D. Conger". The signature is fluid and cursive, with a stylized "G" and "C".

Owner of The Conger Collection SC (high end vacation homes in Eagle River)
Principle and broker for Vacasa Wisconsin LLC (includes about 150 vacation homes in Eagle River)

Chanticleer inn..

1458 East Dollar Lake Road Eagle River, WI 54521

(715) 479-4486

www.chanticleerinn.com relax@chanticleerinn.com

March 12, 2022

Ms. Kristy Nieto, Division Administrator
Public Service Commission of Wisconsin
48222 Madison Yards Way
Madison, WI 53707

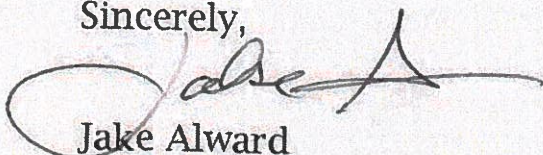
Dear Ms. Nieto,

As the owner of the Chanticleer Inn, I am writing in support of Charter Communications in their application for the 2022 Broadband Expansion Grant funding for their Town of Lincoln project. The area covered in this project has a significant concentration of living units and is very underserved by broadband.

Owning a premier resort in Vilas County it is crucial that we have high-speed broadband for tourists who want to stay here at our resort and in this region. In today's day and age high-speed broadband is essential for today's sophisticated traveler and their families. We would highly value the Public Service Commission awarding this grant to Charter Communications to better serve the Town of Lincoln in Vilas County. This is absolutely critical to ensure a robust economy.

Should you have any questions please feel free to contact me.

Sincerely,



Jake Alward
Owner

High-Speed Internet at Little Spider Lake House in Arbor Vitae, WI

jrdopke@gmail.com <jrdopke@gmail.com>

Wed 9/23/2020 10:26 PM

To: ashleymroach@outlook.com <ashleymroach@outlook.com>

Cc: jrdopke@gmail.com <jrdopke@gmail.com>

Hi Ashley,

Thank you for taking my call earlier this week.

As I mentioned to you during our conversation, my partner and I own a lake house property on Little Spider Lake in Arbor Vitae. The property has been in my family since 1988.

Over the years, we have seen several improvements to the infrastructure of our sub-division, including the installation of underground natural gas and electric utilities. These improvements have increased the reliability of the utilities and the value of the properties in the area. The one improvement that we are very interested in having is high-speed internet service, whether it be underground fiber-optic or cable.

My employer is headquartered in Cleveland, OH, and I work remotely, so I can work virtually from any location that has high-speed internet. Currently, we have DSL internet service through Frontier. The service maxes out at 5 Mbps download and .50 Mbps upload. 5 Mbps internet connection is ok for checking email and streaming music. However, 5 Mbps is barely adequate for video conferencing and streaming videos.

During the summer months, I experience numerous interruptions and reduced download and upload speeds. Unfortunately, due to the limited internet service at the lake house, it reduces the amount of time I can work remotely from there. If high-speed internet was available to us, we could spend more time at the lake house and support the local economy.

Please let me know what we can do to petition the internet providers to bring high-speed internet to our sub-division and surrounding area. You can contact me at jrdopke@gmail.com or my cell phone (262) 853-1432.

Thanks!

John Dopke

Internet

Kate Mutchnik <katiesue392@me.com>

Tue 5/19/2020 12:08 PM

To: townofav@frontier.com <townofav@frontier.com>

Cc: AshleyMRoach@outlook.com <AshleyMRoach@outlook.com>

Hello,

I spoke with Ashley about my woeful internet service at my vacation home at 9986 Winat Rd in Arbor Vitae. She suggested I write a letter for you to compile evidence when looking to attract a better service provider.

I currently have Frontier DSL. I pay for 3 mbps and only receive 1 mbps. I recently upgraded my modem and the tech said that yes, I can only get 1mbps based on my location. 3 mbps is severely limited internet and I am even more limited than what I pay for. Frontier won't even let me only pay for 1mbps. As a comparison, I get over 350 mbps at my permanent residence. That is a big difference.

I have owned the house for 12 years and started out with Hughes Net satellite service. The speed was always sketchy and if you used more than your allotted share of mbps, then they throttled your service. It was very frustrating and was the reason that I switched to Frontier. But both companies are way less than ideal.

I am hoping that we can rally to get reliable internet in Arbor Vitae sooner rather than later. Please let me know what else I can do to help the cause.

Most sincerely,

Kate Mutchnik
847-226-8066

Lakeland Aviation of Minocqua, Inc.

1545 N. Farming Rd.

Arbor Vitae, WI 54568

715-356-3891 info@lakelandfbo.com

I am writing you in support of Charter Communications and their application for the 2022 Broadband Expansion Grant funding for their Vilas County project. The area around Lakeland Aviation and the airport it self would greatly benefit from Broadband service.

We work hard to support our local community as does Charter Communications. Allowing them this grant to help bring high speed internet access to our area would have a very positive impact and help keep our county and township on a path of growth and betterment.

Thank you for your time and consideration regarding this matter.

Jesse Birginal.

Lakeland Aviation of Minocqua